SOUVENIR

16th Annual Conference

Decrypting the Enigma of AUFI

INDIAN ASSOCIATION OF MEDICAL MICROBIOLOGISTS (ODISHA CHAPTER)

13th & 14th September 2025

DEPARTMENT OF MICROBIOLOGY
SCB MEDICAL COLLEGE & HOSPITAL, CUTTACK

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Souvenir

IAMMCON Odisha Chapter 2025

13TH & 14TH SEPTEMBER

SCB MEDICAL COLLEGE, CUTTACK

16th Annual Conference of Indian Association of Medical Microbiologists Odisha Chapter

Department of Microbiology,

SCB MEDICAL COLLEGE & HOSPITAL, CUTTACK

13th & 14th September, 2025

Maharaja Sri Rama Chandra Bhanja Deo

(17 December 1870 – 22 February 1912)

He worked for the all-around development of Mayurbhanj and implemented various welfare schemes designed to help the people. He was revered as a philosopher king. He constituted the state council for administration in the state and brought about reforms in the sphere of language, health and administration.

During his reign, the scientific operation of iron mines was started for the first time and Gorumahisani mines were leased to the Tatas. In 1903, he commissioned a narrow-gauge railway line from Rupsa to Baripada known as Mayurbhanj State Railway.

He was a great patron of Oriya art and culture. The famous Chhau dance of Orissa or "war-dance" was presented by him for a show in 1912 in Calcutta in honor of George V, the British emperor, who was impressed by its beauty and splendour.

In 1892, he made major additions to the royal palace of Mayurbhanj, which has 126 rooms. The front of the palace resembles the Buckingham Palace, which was built in 1908.

Sriram Chandra Bhanja Memorial Fund was established in 1920 in his memory to support irrigation in Mayurbhanj.

डॉ. हरि बाबू कंभमपति
राज्यपाल, ओड़िशा
Dr. Hari Babu Kambhampati
Governor, Odisha

सत्यमेव जयते
राज्यपाल, ओड़िशा
GOVERNOR OF ODISHA

राज भवन
भुबेनश्वर – ७५१००८
RAJ BHAVAN
BHUBANESWAR - 751 008

September 02, 2025

MESSAGE

I am pleased to know that the 16th Annual Conference of the Indian Association of Medical Microbiologists, Odisha Chapter (IAMMCON-OC-2025) is being organized at SCB Medical College & Hospital, Cuttack on 13th and 14th of September, 2025. It is also heartening to note that a souvenir is being released to mark this special occasion.

The theme of the conference "Decrypting the Enigma of Acute Undifferentiated Febrile Illness" is most relevant and timely. Acute undifferentiated febrile illnesses continue to pose major diagnostic and therapeutic challenges in clinical practice. With the growing burden of infectious diseases, the role of medical microbiologists in early detection, accurate diagnosis and guiding effective treatment is of paramount importance.

I am confident that this conference will provide an excellent platform for medical microbiologists, clinicians, researchers and students to share their knowledge, exchange innovative ideas and explore new frontiers in medical science. Such deliberations will undoubtedly contribute to strengthening our healthcare system and enhancing patient care.

I convey my best wishes to the organizers, delegates and contributors for the successful conduct of IAMMCON-OC-2025 and for the publication of the souvenir.

(Hari Babu Kambhampati)

Phone 91-674-2536111/2536581, E-mail : govodisha@nic in, Website : www.rajbhavanodisha.gov.in

सत्यमेव जयते

Mohan Charan Majhi
CHIEF MINISTER
Odisha

LOKASEVA BHAVAN
BHUBANESWAR

MESSAGE

I am glad to know that Indian Association of Medical Microbiologists, Odisha Chapter is organizing its 16th Annual Conference on 13th & 14th September 2025 at SCB Medical College, Cuttack and bringing out a souvenir in commemoration.

In the present era, when emerging and re-emerging infectious diseases continue to challenge public health, such academic deliberations, awareness and collective efforts in research, and clinical practices are essential to address this challenge. I hope this conference will enrich the health scientists and contribute significantly to improving diagnostic facilities and patient care.

I extend my warm greetings to all the microbiologists and wish the conference a grand success.

(MOHAN CHARAN MAJHI)

Dr. Mukesh Mahaling
MINISTER
Health & Family Welfare, Parliamentary Affairs,
Electronics & Information Technology, Odisha.

Telephone :
PBXNo. :
Mobile No.: 6372051004
D.O. No.1771 / MHFWPAE & IT

BHUBANESWAR

Date 20.08.2025

MESSAGE

I am glad to know that the 16th Annual Conference of Indian Association of Medical Microbiologists, Odisha Chapter will be held at SCB Medical College & Hospital, Cuttack on 13th & 14th September 2025 and a Souvenir is being brought out to mark the occasion.

This conference is of immense importance to gather knowledge about the advances in the field of Medical Microbiology, will also help the budding young students to sharpen to get exposure and develop affinity towards different branches, which in turn will benefit the entire state and the country. I am sure, the proceedings of the conference will throw light on newer and better strategies for health care programs to prevent and control infectious diseases.

Medical Microbiologists have proved themselves in controlling many epidemics and pandemic in the past. This is also expected in any public health emergencies if any in the future.

I extend my best wishes for a grand success of the conference.

Mukesh Mahaling

(DR. MUKESH MAHALING)

Ms. Aswathy S., IAS
Commissioner-cum-Secretary
Health & Family Welfare Department
Government of Odisha

Lok Seva Bhawan
Bhubaneswar-751001
Tel : 0674-2536632
E-mail - orhealth@nic.in

Letter No. /SH

Date :

MESSAGE

The Indian Association of Medical Microbiologists, Odisha Chapter, is proud to announce its 16th Annual Conference (IAMMCON-OC-2025), scheduled to be held on 13th and 14th September 2025 at the prestigious SCB Medical College & Hospital, Cuttack.

This year's conference is centered around an intellectually stimulating and clinically relevant theme "Decrypting the Enigma of Acute Undifferentiated Febrile Illnesses (AUFI)".

Acute Undifferentiated Febrile Illnesses pose significant diagnostic and therapeutic challenges, particularly in tropical regions like ours. This conference aims to bring together leading experts, academicians, researchers, and clinicians to deliberate on recent advances, diagnostic approaches, and management strategies to tackle AUFI effectively.

To commemorate this significant event, a Souvenir will be published, capturing the essence of the conference including scientific abstracts, messages from dignitaries, articles and highlights of the collective efforts in the field of medical microbiology.

Wishing everyone an enlightening and successful conference.

(Aswathy S.)

DIRECTORATE OF MEDICAL EDUCATION & TRAINING, ODISHA
Heads of Department Building, Bhubaneswar, 751001, Tel No. 0674-2393847, 2394255,
E-Mail: dmetbbsr4@gmail.com www.dmetodisha.gov.in

Prof. (DR.) Santosh Kumar Misra (M.S. ENT)
Director of Medical Education & Training,
Odisha, Bhubaneswar

Bhubaneswar
Date : 02.09.2025

MESSAGE

It gives me great pleasure to know that the 16th Annual Conference of the Indian Association of Medical Microbiologists, Odisha Chapter (IAMMCON-OC 2025) is being held at SCB Medical College & Hospital, Cuttack, on the 13th and 14th of September 2025. With its theme "Decrypting the enigma of AUFI," this event is a wonderful opportunity for medical microbiologists, clinicians, and researchers to come together, share insights, and advance understanding in infectious disease diagnosis. I extend my heartfelt wishes to all the organizers and participants for great success and hope this conference inspires meaningful progress in medical education and healthcare for Odisha and beyond.

(Prof. (DR.) Santosh Kumar Misra)

Prof. (Dr.) Manash Ranjan Sahoo
MS, FACS
VICE-CHANCELLOR
Odisha University of Health Sciences Sishu Bhawan Square
Bhuabneswar, Odisha

Phone No. 0674-2597266
Mob No. 9937025779
Email ouhs@ouhs.ac.in
D.O. No. 235-vc /OUHS
Bhubaneswar

Date : 09.09.2025

MESSAGE

I am pleased to know that the 16th Annual Conference of the Indian Association of Medical Microbiologists, Odisha Chapter (IAMMCON-OC, 2025) is being organized by the Department of Microbiology, SCB Medical College & Hospital, Cuttack, with the theme "Decrypting the Enigma of AUFI". The inclusion of workshops on "Diagnosis of Tuberculosis - From Microscopy to Molecular Techniques" and "Role of Automation in Diagnosis of Sepsis" makes this conference highly relevant to present-day healthcare challenges.

Conferences of this nature provide a significant platform for academicians, researchers, and clinicians to share advancements, deliberate on emerging trends, and strengthen collaborative efforts in the field of microbiology. They also serve to inspire young medical professionals to engage in research and contribute towards improved patient care.

I extend my heartiest congratulations to the organizing committee and participants for their dedicated efforts in bringing this academic event to fruition. I wish the conference grand success and hope that it will pave the way for meaningful discussions, innovative solutions, and impactful outcomes in the field of medical microbiology.

With best wishes,

MRSahoo 09/9/2025

(Prof. (Dr.) Manash Ranjan Sahoo)

Office of the Dean and Principal
S.C.B. Medical College and Hospital
Cuttack, Pin - 753007 Odisha, India
Phone: 0671-2414355, Telefax: 0671-2416913
Email: scbmcctc@gmail.com **Web:** www.scbmch.nic.in

Dr. Lucy Das
DEAN & PRINCIPAL
SCB Medical College &
Hospital, Cuttack

MESSAGE

It is a great pleasure to know that the Department of Microbiology, SCB Medical College and Hospital, Cuttack is organising the 16th annual conference of Indian Association of Medical Microbiologists, Odisha Chapter.

Pyrexia of unknown origin has large contribution to increasing morbidity and mortality in patients. I hope the conference theme "Decrypting the enigma of AUFI" emphasizes on choosing early & correct method for prompt diagnosis and control of disease. I am sure the deliberations in the conference will pave way to smarter strategies in reducing disease burden of health care system of Odisha.

I convey my heartfelt good wishes to the organizers and participants for the success of the conference.

Lucy Das
8/9/25

(Dr. Lucy Das)

Prof. (Dr.) Goutam Kumar Satpathy
M.S., (Orthopedics)
Professor of Orthopedics &
I/c. Medical Superintendent,
SCB Medical College Hospital,
Cuttack

MESSAGE

I am delighted to know that the Indian Association of Medical Microbiologists, Odisha Chapter is Organizing its 16th Annual Conference on 13th & 14th September, 2025, at SCB Medical College, Cuttack and a souvenir is going to be published to mark this event.

Identifying specific cause is challenging, and there has been tremendous advancement in the field of microbiology with newer diagnostic tools. In the same time due to emergence of non-specific presentation and atypical symptoms, many times it becomes difficult to treat. So making a protocol based diagnostic approach is crucial to manage the associated mortality and economic burden, and improving the quality of health care service delivery. The theme of the conference "Decrypting the enigma of AUFI" is rightly chosen in the present scenario.

I, congratulate the organizers for holding the conference at SCB Medical College, Cuttack and extend my warm wishes for its success.

Prof. (Dr.) Goutam Kumar Satpathy

Dr Ashoka Mahapatra

President, IAMM , Odisha Chapter

Message From President...

It gives me great joy to welcome you all to the 16th Annual Conference of the Indian Association of Medical Microbiologists, Odisha Chapter, to be held on the 13th and 14th of September 2025 at one of the prestigious Institute of Odisha "SCB Medical College, Cuttack".

This year's symposium theme, "Combating Acute Undifferentiated Febrile Illness - Opt for the Right Path," is one that continue to pose a major diagnostic and therapeutic challenge in clinical practice. As microbiologists, we are often called upon to bring clarity and decision making. A febrile illness with overlapping symptoms remains challenging, especially in our region where infectious diseases are diverse and ever evolving.

Thus, the responsibility of microbiologists in guiding accurate, evidence-based diagnosis is crucial. We not only guide our clinical colleagues but also contribute directly to saving lives and reducing the burden on public health.

Like, every year, this gathering brings an opportunity for all of us to share our experiences, enrich our collective knowledge and strengthen our bonds as a professional family. I am hopeful that the discussions, scientific sessions, and interactions will open new perspectives and inspire us to apply the best practices in our laboratories and institutions.

I on behalf of IAMM Odisha Chapter, warmly invite each one of you (participants, distinguished guests & eminent speakers) wholeheartedly to contribute your insights, and carry back fresh ideas to your workplace. Together, let us make this conference a vibrant, memorable, and impactful event.

I wish the organizing committee great success in conducting this scientific event.

With warm regards

Ashoka Mahapatra

(Ashoka Mahapatra)

Dr. Suneeta Sahu

Secretary, IAMM , Odisha Chapter

Message From Secretary...

It is my honour, pride and privilege to write a message for the IAMMCON Odisha chapter annual conference which is being organized at SCB Medical College and Hospital, Cuttack. I am glad to mention that this is our 16th state chapter conference. This conference will be preceded by two workshops named "Diagnosis of Tuberculosis : Microscopy to Molecular Techniques" and Role of Automation in Diagnosing sepsis followed by the main event whose theme has been very rightly chosen as "Combating AUFI : OPT for the Right Path".

Acute undifferentiated Febrile illness (AUFI) poses a significant global burden, particularly in tropical and subtropical regions, where it is a leading cause of morbidity and mortality. The burden is driven by challenges in diagnosis, potential for life threatening complications, and the overuse of antibiotics due to the nonspecific nature of the illness.

Changes in climate may affect the burden and distribution of vector borne diseases, for example increasing temperature provides an environment congenial for diseases to spread. Furthermore, tropical and subtropical regions often exhibit rich biodiversity and a close interface between humans, wildlife, and domestic animals. This ecological diversity increases the risk of zoonotic diseases, where infectious agents can get transmitted from animals to humans. In India there is a strong seasonal variation in the incidence of some AUFI with winter being the most affected season. AUFI can be a sign of serious illness and can lead to further complications if left untreated. Therefore, early diagnosis is essential for isolating and treating the patient, which helps prevent the spread of the disease to others and can be crucial in the context of outbreaks.

Clinical Microbiologists play a very important role in guiding the clinicians about the treats of infectious diseases and how else can be it be better showcased than this annual conference platform. The Oration followed by the scientific sessions, poster, papers and Quiz will see the perfect amalgamation of learning, collaborating and networking for all along with the PG students.

The hard work done by the organizing team is deeply appreciated, gratitude to the speakers and all the delegates and I am sure for a super successful academic event.

Welcome all to Cuttack!! Long Live IAMM Odisha Chapter !!

Suneeta

(Dr. Suneeta Sahu)

Dr. Dharitri Mohapatra

Organizing Scretary, Professor & HOD, Dept. of Microbiology
SCB MCH, Cuttack

From The Organising Committee...

Dear Delegates

On behalf of the organizing committee, I welcome you all to the 16th Annual conference of Indian Association of Medical Microbiologists Odisha Chapter- 2025, to be held on 13th and 14th September-2025 at SCB Medical College in the millennium city of Cuttack.

The organizing committee members have left no stones unturned to make the Conference a grand success. I hope the event will be of immense intellectual value to all of you. We are eagerly waiting to welcome all the delegates in the grand old city of Cuttack and ensure that the conference leaves a pleasant memory to cherish.

The theme of the Conference **"Decrypting the enigma of AUFI"** is of paramount importance and a deliberation on the topic will go a long way in contributing to the treatment and patient care. The Preconference workshops on **"Diagnosis of Tuberculosis-From Microscopy to Molecular techniques"** and **"Role of Automation in Diagnosis of Sepsis"** have been selected to address the early diagnosis and treatment planning the need of the hour.

The members of the organizing committee look forward to meet and interact with you all in the historical city of Cuttack and to jointly make the conference a grand success.

Waiting to meet you all.

Regards

Dharitri Mohapatra.

(Dr. Dharitri Mohapatra)

Dr. Bhabani Patnaik

Associate Professor, Dept. of Microbiology, SCB MCH, Cuttack
Joint Organising Secretary

Message

Dear Esteemed Delegates,

Greetings from Silver City, Cuttack.

It is my immense pleasure to welcome you to the Conference of Medical Microbiologists at SCB Medical College, Cuttack. This esteemed gathering will provide a platform for knowledge sharing, collaboration, and discussion on the latest advancements in medical microbiology.

I would like to extend my heartfelt gratitude to our distinguished speakers, delegates, and sponsors for their valuable contributions. The organizing committee has worked tirelessly to ensure a seamless experience for all participants.

I look forward to an engaging and enriching conference that will foster innovation and excellence in the field of medical microbiology.

Thank you for your participation and enthusiasm.

Jai Maa Cuttack Chandi !!!

(Dr. Bhabani Patnaik)

Dr. Soumyakanta Sahoo

Senior Microbiologist & ICO, Kalinga Hospital, Bhubaneswar

From the Editor's Desk...

On behalf of the scientific committee of 16th Annual state conference of IAMM held at prestigious SCB Medical College, I welcome you all to the scientific sessions.

The symposium on 'Acute Undifferentiated Febrile Illness' is being organized which will enlighten us about the advances on diagnosis, treatmentof the same.

Acute Undifferentiated Febrile Illness is often fraught with challenges. The elusive nature of the condition demands a meticulous and comprehensive approach. Physicians rely on thorough medical histories, detailed physical examinations, and various laboratory tests. Despite these tools, reaching a definitive diagnosis can be a prolonged and frustrating process, causing physical and emotional distress for the patient.

Imaging modalities, such as CT scans and PET scans, offer valuable insights into areas that may be harbouring the elusive cause. Molecular and genetic testing bring a level of precision previously unavailable, enabling clinicians to identify pathogens or genetic abnormalities that may underlie the fever. Invasive procedures like biopsies provide histopathological evidence crucial for a conclusive diagnosis.

Antimicrobial therapy addresses infectious causes, while inflammatory conditions may require immunosuppressive agents, and neoplastic diseases may call for chemotherapy.

The conference committee has made its best efforts to offer both academic and cultural program and expect that all the participants will enjoy with utmost enthusiasm.. I wish the organizers the very best for grand and successful conduct of the conference.

(Dr. Soumyakanta Sahoo)

ORGANIZING COMMITTEE

Department of Microbiology, SCB Medical College & Hospital, Cuttack

OFFICE BEARERS OF IAMM (ODISHA CHAPTER)

Dr Ashoka Mahapatra
Peresident, IAMM
(Odisha Chapter)

Dr Suneeta Sahu
Secretary, IAMM
(Odisha Chapter)

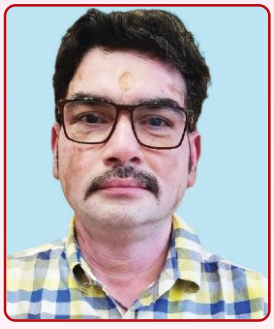
Dr Bhabani Patnaik
Treasure IAMM
(Odisha Chapter)

EXECUTIVE COMMITTEE MEMBERS OF IAMM (ODISHA CHAPTER)

Dr. Soumyakanta Sahoo

Dr. Rajashree Panigrahy

Dr Dharitri Mohapatra



Dr Bibhudatta Rautaraya

Dr Bijayani Behera

Dr Basanti Pathy

Dr. Indrani Mohanty

Chairman Organizing Committee

Dr. Lucy Das

Dean & Principal, SCB MCH, Cuttack

Chairman Reception Committee

Dr. Goutam Satapathy

Superintendent, SCB MCH, Cuttack

Organizing Secretary

Dr. Dharitri Mohapatra

Jt. Organizing Secretary

Dr. Bhabani Patnaik

Treasurer

Dr. Somi Patro

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Dr. Mukesh Kumar Sahoo

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Dr. Sonam Shilpa Maharana
Dr. Anindita Routray
Dr. Swaranika Mondal

Registration Committee

Dr. Preet Priyadarshini
Dr. Anindita Routray

16TH IAMMCON (ODISHA CHAPTER) – CONFERENCE PROGRAMME

1st Day (13th September)

08.00 am onwards : Workshop Registration (Venue New Auditorium SCBMCH)

09.00 am - 05.00 pm : Hands-on Workshops

1) **Diagnosis of Tuberculosis-From" Microscopy to Molecular techniques**
2) **Role of Automation in Diagnosis of Sepsis**

03.00 pm onwards : Conference Registration (Venue New Auditorium SCBMCH)

05.00pm Onwards - Inauguration

- Felicitation of Dr Savitri Sharma
- OMM Award
- Scientific Presentation (15 min)
- Cultural Programme
- Gala Dinner

2nd Day(14thSeptember)		
Time	**Topic**	**Speaker**
07.00 am onwards	Registration and Breakfast	
07:00 am - 09:00 am	E-Poster evaluation	
09:00 am - 10:00 am	Prof. Dr. Bikram Das Memorial Oration	Dr. Savitri Sharma Director Emeritus, Laboratory Services, LVPEI Network, Hyderbad.
NATIONAL SYMPOSIUM - COMBATING AUFI: OPT FOR THE RIGHT PATH		
10:00 am - 10:15 am	Epidemiology of AUFI; Global trends and challenges	Dr Jayanta Kumar Panda Professor Medicine SCBMCH Cuttack
10:15 am - 10:40 am	Diagnostic algorithm for bacterial etiology	Dr Rajashree Panigrahi Professor Microbiology IMS SUM Hospital , BBSR
10:40 am - 11:00 am	Current perspective in diagnosis of AUFI due to viruses	Dr Radha Kanta Ratho Dean of Academics PGIMER, Chandigarh
11:00 am - 11:15 am	Exploring the underestimated & overlooked organisms	Dr Nipa Singh Professor Microbiology KIMS. Bhubaneswar
11:15am - 11:35am	Unraveling the mystery of AUFI; Recent advances and future direction	Dr Bijayini Behera Professor Microbiology AIIMS, Bhubaneswar
11.35 - 11.40 am	Scientific Presentation	
11.40 am -12.00pm	Group Photo Session & Tea break	
12.00 pm - 01.00pm	IAMM Quiz	Dr. Soumya, Dr Mayur & Dr Subasini
01.00pm - 02.00pm	General Body Meeting	
02.00 pm - 03.00pm	Lunch	
03.00 pm - 05.00pm	Oral Presentation (Award & Free Category)	
05.00 pm onwards	Prize Distribution & Valedictory	

PROF. (DR.) BIKRAM DAS

Born on 13th February 1921 to a family of freedom fighters at his maternal village, Bira Purusottampur of Puri. He was a person with many achievements. Father was late Padmabhusan Pt. Nilakantha Das and mother late Radhamani Debi and elder brother was legendary advocate late Ashok Das. His very childhood and adolescence was nurtured in the cradle of revolution for independence. He was first imprisoned in 1939, while a student of Ravenshaw Collegiate School of Cuttack and sent to Angul central jail. Subsequently he had to go underground to avoid further arrests and suffered great setbacks in his academic career although never compromised with his 1921-2007 involvement in the national movement.

Completed I.Sc. from Bongobasi College, Kolkata and joined Orissa Medical College in 1945. Graduated from S.C.B. Medical College, Cuttack in 1950 and immediately started to serve the people. Being ambitious, wanted to persue higher education in Pathology and was selected to prosecute 'Residency' in U.S.A .. Initially worked as 'Resident' in 'Baroness Erlanger Hospital, Chattanooga, Tennessee in 1952 and then shifted and completed his Masters Degree in Pathology under the guidance world famous Prof. McManus and Prof. William Boyd (then visiting professor in U.S.A.) from University of Alabama in Birmingham, U.S.A. in 1954. His major contributions were in the field of 'histochemistry' and his thesis for M.S. was on Neuro- Endocrine Pathology.

He was married to Smt. Basanta Kumari and was blessed with three children. Despite being offered faculty position in U.S.A. in early 1950s, a dream longed by most who go abroad for higher studies, Dr. Bikram Das refused to settle abroad and came back to India in 1954 to serve his own people. Joined the State Government service at a later stage of life in 1955 and that too after being a qualified Pathologist from U.S.A. (10) 1019

Starting his career as an Asst. Surgeon, he became the Professor of the Department of Pathology & Bacteriology at M.K.C.G. Medical College, Berhampur in 1968. He had organized the whole department and was instrumental in getting M.D. (Path.&Bact) recognized by M.C.I. at Berhampur in 1970. Subsequently, served as Prof.& H.O.D. of Pathology & Bacteriology at S.C.B. Medical College, Cuttack. He was the founder Professor of Microbiology at S.C.B. Medical College, Cuttack and retired from Govt. service in February 1979. 101

As a luminary in his field, was examiner to 19 Universities in India and had served as an Advisor to the Union Public Services Commission for more than one decade in Pathology, Microbiology and F.M.&T. He was conferred "Founder Fellow" of the Indian College of Pathologists in 1993.

Prof. Das was blessed with three children. Eldest daughter Sumitra is a Mathematician and settled with her family in Canada, son Prof.(Dr.) Sidhartha Das is Dean & Principal at S.C.B. Medical College, Cuttack, daughter-in-law Dr. Sujata Misra is Professor of Obst. & Gyn. and the younger daughter Dr. Shruti Das and her husband are senior faculties in English in state Govt. Service.

A multifaceted personality with passion for literature, Prof. Bikram Das was a literati par excellent with nearly 50 publications as historical novels, travelogues, fictions, essays, poetry-book, biography and scientific literature, both in Oriya and English.

A man of plural pursuits, his genius bears an imprint in enhancing the horizons of human values, knowledge and wisdom.

Prof. Dr. Bikram Das passed away on 24th June 2007.

PROF. (DR.) BIKRAM DAS MEMORIAL ORATION

Dr. Savitri Sharma

Director Emeritus, Laboratory Services,
L V Prasad Eye Institute, Hyderabad

* One among the very few Ocular Microbiologists in the world.
* She has 378 publications and has a patent on a novel DNA chip for the simultaneous detection of bacterial, fungal, viral and parasitic infections of the eye
* She has guided seven Ph.D students.
* She has 22 chapters in books and has authored a book "Ocular Microbiology" in 1988
* She received 18 grants from national and international research funding agencies and received 41 awards and honors from national and international societies
* She was the President of national associations such as IAMM (2009) and ISMM (2011-13) and was conferred the Fellow of the National Academy of Medical Sciences
* She was the President of Ocular Microbiology and Immunology Group, USA in 2019.
* She is listed among top 2% scientists of the world in 2020, 21, 22 and 23 and ranked no. 4 among the 10 scientists from India under the discipline of 'Ophthalmology'.

Unwrapping Diagnostic Thrills and Relevant Research in Ocular Microbiology

Dr. Savitri Sharma, MD, FAMS
Director Emeritus, Laboratory Services, LVPEI-Network
L V Prasad Eye Institute, Hyderabad
Prof. Bikram Das Memorial Oration

ABSTRACT

Eye is a beautiful organ of the body providing a window to the whole persona. This is true for the science of microbiology as well. Many infectious diseases are manifested in the eye and the lifetime of a microbiologist may not be enough to study them. Along with challenges of accessing and processing minute samples come the thrill of diagnosis that can be eye saving and at times lifesaving. The interplay of organisms and immune system is unique to the eye providing opportunity for endless research to fill the gaps. For me, more than three decades of active research, teaching and diagnostic work have gone by in ocular microbiology and this presentation will provide a glimpse of the same in brief.

The external ocular surface acquires microbial flora at birth while the inner portions of the eye remain sterile. Some of the commensals may become resident flora in the conjunctiva and lids such as *Staphylococcus epidermidis*, other species of *Staphylococcus* including *S. aureus*, *Propionibacterium acne*s and different species of *Corynebacterium*. On the other hand, any microorganism can reside in the eye temporarily (bacteria, fungi, viruses, parasites) and can cause an eye infection given a chance. Research in microbiome has shown a whole new aspect to ocular flora adding many more that can be seen in culture.

The anterior segment of the eye is usually is infected by direct invasion from the anterior route and blood borne infections may reach the posterior segment of the eye. Local as well as systemic immunity play significant roles in the pathogenesis of an infection. Virulence of the invading organisms is an equally important factor that determines the outcome. Working in tandem with clinicians helps identify areas for research. Clinically important research questions that originate during the practice of diagnostic microbiology truly make the science interesting, worthwhile and rewarding. Below are some of the areas to which I dedicated decades of work.

***Acanthamoeba*:**

In 1987, the diagnosis of the first *Acanthamoeba* keratitis from India became the starting point for a whole string of research questions on *Acanthamoeba*. With the help of two DBT grants and one PhD scholar we set out to determine the epidemiological features and predisposing factors for Acanthamoeba keratitis patients in India. We described the clinical features of *Acanthamoeba* keratitis in Indian patients, determined taxonomic status of *Acanthamoeba* associated with keratitis in Indian patients and studied

markers to aid rapid diagnosis of *Acanthamoeba* keratitis. We answered the questions whether *Acanthamoeba* adhered to contact lenses and if yes, what was the level of adhesion in different lenses? We also studied the adhesion of the organism to human corneal epithelial cells. Our work resulted in nine publications covering these aspects.

Microsporidia:

The first report of ocular microsporidiosis from India was from L V Prasad Eye Institute in 2003. Several questions coming to our mind included: What is the epidemiology, predisposing factors, clinical features, and treatment options of patients with microsporidial keratitis, what laboratory methods could be used for the detection of microsporidia in ocular specimens, which tissue culture method is optimum for growth of microsporidia, can we develop sensitive and specific molecular diagnostic markers for rapid detection and identification of microsporidia species in ocular samples, what is the protein profile of microsporidia causing ocular infections based on SDS-PAGE / MALDI-TOF etc. Two DBT grants and two PhD scholars tried to do their best to achieve the answers. This work resulted in 13 publications.

Pythium insidiosum

Encounter with non-sporulating fungi in clinical microbiology often poses a challenge in identification of clinical fungal isolates. DNA sequencing technology has become a handy tool to identify such fungi and thus came to our knowledge occurrence of *Pythium insidiosum* keratitis in our patients that were thought to be fungal. Not only did we learn to identify them in direct microscopy of corneal scrapings, we ventured to address several aspects of the disease through a DST supported PhD project. We developed an experimental rabbit model for corneal infection by *P. insidiosum,* determined the efficacy and safety of different antibiotics in the treatment of corneal infection by *P. insidiosum* in rabbit cornea, studied the innate and adaptive immunity expressed by cornea when challenged with *P. insidiosum* in a rabbit model, identified putative virulence genes using *in silico* bioinformatic tools by comparative genomics and studied the temporal expression of selected virulence genes in the *ex-vivo* culture of human cadaveric cornea infected with *P. insidiosum.*

At L V Prasad Eye Institute, several clinical trials in contact lens wearers have provided fundamental information such as what are the types of adverse responses in the eye during different types of contact lens wear, what is the incidence and characteristics of different adverse events, is the bacterial flora of the eye related to the adverse events during lens wear, etc.

Molecular diagnostic methods have given impetus to diagnosis of viral eye infections in a big way. Polymerase chain reaction (PCR) based methods are commonly employed for the diagnosis of ocular viral infections such as herpes simplex virus, varicella zoster virus, cytomegalovirus, etc. Sequence based typing of species are being applied to bacteriology, mycology and parasitology with great aplomb. Real time PCR and next generation sequencing have become a routine in some ocular microbiology laboratories. L. V. Prasad Eye Institute has contributed to the development of a “vision chip” which aids as a diagnostic tool in several systemic viral, bacterial and fungal diseases including that of the eye and is available with XCyton Diagnostic at Bangalore.

The research arena is wide open in the field of ocular microbiology where sky is the limit, and I would encourage more and more microbiologists to join the crusade.

National Symposium
on
Combating
Acute Undifferentiated Febrile Illness (AUFI) :
Opt for the Right Path

Epidemiology of Acute Undifferentiated Febrile Illness (AUFI): Global Trends and Challenges

Prof. Dr Jayanta K. Panda
Prof. PG Dept. of Medicine, S.C.B Medical College, Cuttack

ABSTRACT

Introduction

Acute Undifferentiated Febrile Illness (AUFI) represents a major public health problem across the world, especially in tropical and subtropical regions. It is defined as fever of acute onset, usually lasting less than 14 days, without a definite clinical focus after initial evaluation and basic investigations. Although seemingly straightforward, AUFI is an umbrella term encompassing a wide variety of etiologies, ranging from self-limiting viral infections to life-threatening bacterial and parasitic diseases. Its nonspecific presentation, coupled with limited diagnostic capacity in resource-poor settings, makes AUFI one of the most challenging syndromes for clinicians and epidemiologists.

The significance of AUFI extends beyond clinical medicine into broader public health, as outbreaks of dengue, malaria, rickettsioses, and viral hemorrhagic fevers can manifest as undifferentiated febrile illnesses, often overwhelming fragile health systems. Understanding the epidemiology and global trends of AUFI is therefore critical to improve surveillance, diagnostic strategies, and patient outcomes.

Definition & Challenges in Diagnosing AUFI

AUFI is defined as an acute fever without an identifiable source after initial history, examination, and basic laboratory investigations. This definition itself highlights the diagnostic uncertainty inherent in the syndrome.

Key challenges include:

- **Overlapping clinical features:** Fever, headache, malaise, myalgia, and gastrointestinal disturbances are shared across dengue, malaria, typhoid, leptospirosis, and rickettsial infections, complicating diagnosis.
- **Limited diagnostic access:** Many endemic areas lack reliable point-of-care tests, leading to delays or misdiagnosis.
- **Empirical treatment practices:** In the absence of clear etiologies, clinicians frequently prescribe antibiotics or antimalarials, contributing to antimicrobial resistance.
- E**merging and re-emerging pathogens:** Outbreaks of chikungunya, Zika, hantavirus, and COVID-19 have added to the spectrum of AUFI.
- **Lack of standardized definitions:** Variability in defining AUFI across regions makes it difficult to compare epidemiological data.

Thus, AUFI embodies not only a diagnostic dilemma but also a systemic challenge requiring global attention.

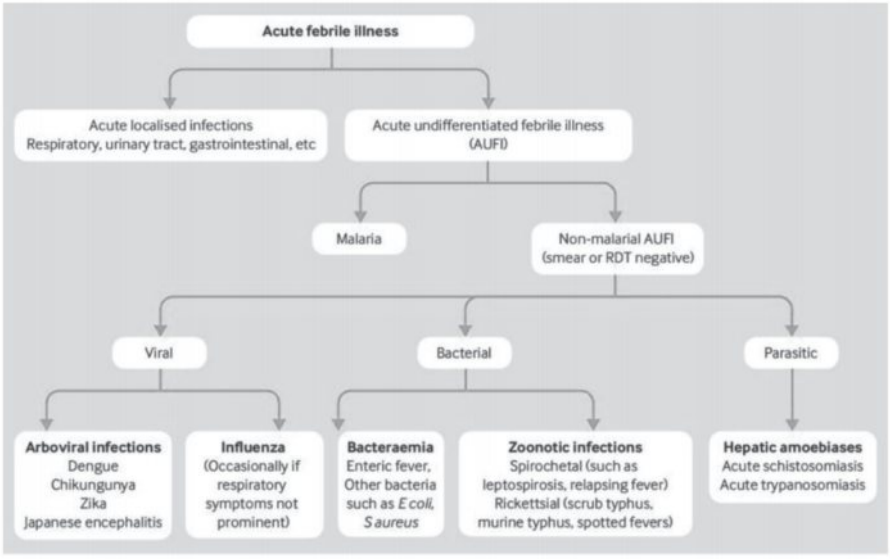

Fig-2

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Global & Regional Burden – Epidemiological Trends

AUFI is particularly burdensome in low- and middle-income countries, where tropical climate, poor sanitation, and limited health infrastructure facilitate transmission of infectious agents.

- **India:** India represents one of the largest burdens of AUFI worldwide, owing to its vast population, diverse climate, and co-existence of multiple pathogens. Seasonal monsoons, high vector density, and widespread antimicrobial use contribute to recurrent epidemics. Dengue is endemic in most states, with annual outbreaks causing substantial morbidity. Scrub typhus has re-emerged as a significant cause of AUFI across northern and northeastern states, while enteric fever continues to be highly prevalent due to challenges in sanitation and water safety. Malaria, particularly *Plasmodium falciparum* in central and northeastern regions, remains an important contributor. Surveillance studies from tertiary hospitals in India suggest that AUFI accounts for up to **40–60% of medical admissions during peak monsoon months**, underlining its national health impact.
- **Asia (excluding India):** In Nepal, Bangladesh, Myanmar, and Thailand, AUFI is among the leading causes of hospitalization. Dengue, scrub typhus, malaria, and leptospirosis dominate the spectrum, often with overlapping seasonal peaks.
- **Africa:** Malaria remains the predominant etiology, especially *Plasmodium falciparum*, but bacterial sepsis and arboviral infections are increasingly recognized due to improved surveillance.
- Latin America: Dengue, chikungunya, and Zika contribute to most AUFI cases. Urbanization, unplanned settlements, and vector proliferation have amplified disease transmission.
- High-income countries: AUFI is rare but frequently reported in travelers returning from endemic regions, highlighting its global relevance.

Climate change, international travel, and urban expansion are shifting the epidemiology of AUFI. Diseases

once confined to specific geographies are spreading widely, making AUFI a truly global health concern.

Clinical Spectrum: Distinguishing Mild vs. Severe Cases

AUFI ranges from mild, self-limiting febrile illnesses to severe, potentially fatal diseases.

- **Mild AUFI:** Most patients present with fever, chills, fatigue, headache, and myalgia. These cases often resolve with symptomatic therapy.
- **Severe AUFI:** A subset of patients progress to life-threatening complications such as septic shock, multi-organ dysfunction, severe bleeding (dengue hemorrhagic fever), cerebral malaria, or acute respiratory distress (hantavirus pulmonary syndrome).

Recognizing early warning signs—hypotension, jaundice, altered mental status, bleeding diathesis—is crucial. Differentiating mild from severe cases not only guides therapy but also optimizes resource allocation in settings with limited intensive care facilities.

Common Etiologies of AUFI

1. Bacterial causes

- **Enteric fever (Salmonella Typhi and Paratyphi):** Endemic in South Asia and Africa due to contaminated food and water.
- **Leptospirosis:** Associated with heavy rainfall, flooding, and exposure to rodent urine-contaminated water.
- **Rickettsial infections (e.g., scrub typhus):** Increasingly recognized in Asia, often misdiagnosed without specialized tests.
- **Other bacterial sepsis:** Gram-negative bacteremia from urinary or intra-abdominal sources may initially present as AUFI.

2. Viral causes

- **Dengue fever:** The most common arboviral infection worldwide, responsible for significant hospitalization and mortality.
- **Chikungunya & Zika:** Prominent in Asia and the Americas, transmitted by *Aedes* mosquitoes.
- **Influenza and non-specific viral fevers:** Occasionally present without localizing signs.
- **Viral hemorrhagic fevers (Ebola, Lassa, Crimean-Congo):** Rare but cause high-fatality outbreaks, primarily in Africa and parts of Asia.

3. Parasitic causes

- **Malaria:** Particularly *Plasmodium falciparum*, remains one of the most lethal causes of AUFI. *Plasmodium vivax* may also present with undifferentiated fever.
- **Leishmaniasis (visceral kala-azar):** Chronic febrile illness in South Asia, East Africa, and parts of Latin America.

4. Fungal causes

Fungal infections rarely cause AUFI but may mimic it in immunocompromised patients. Disseminated histoplasmosis, cryptococcosis, and candidiasis are potential etiologies in such populations.

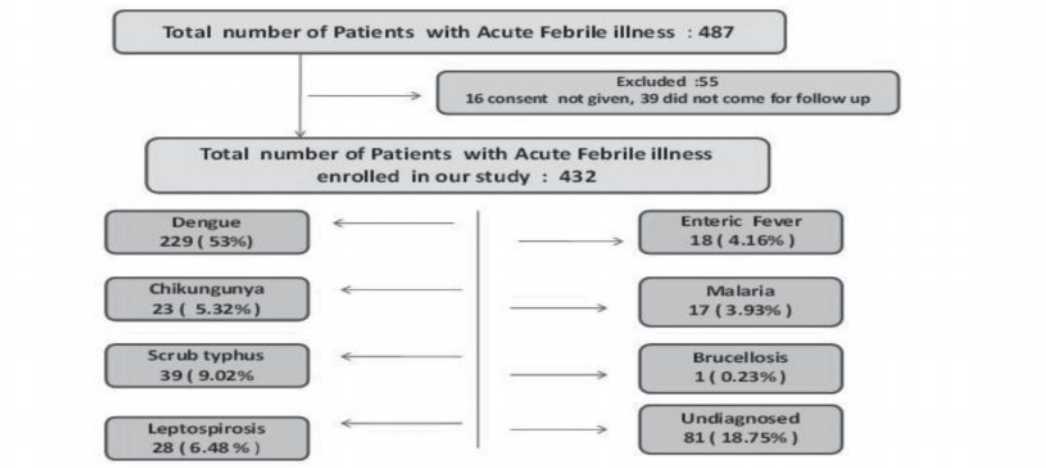

Fig-4

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Global Challenges and Way Forward

The challenges posed by AUFI extend from bedside medicine to global health policy:

- **Diagnostic limitations:** Absence of affordable, rapid, multiplex diagnostics delays targeted therapy.
- **Rising antimicrobial resistance:** Empirical antibiotic use is driving resistance in pathogens such as *Salmonella* and *E. coli*.
- **Weak surveillance systems:** Many endemic regions underreport febrile illness due to fragmented health systems.
- **Emerging infections:** Climate-driven changes in vector ecology and globalization are enabling new pathogens to spread.

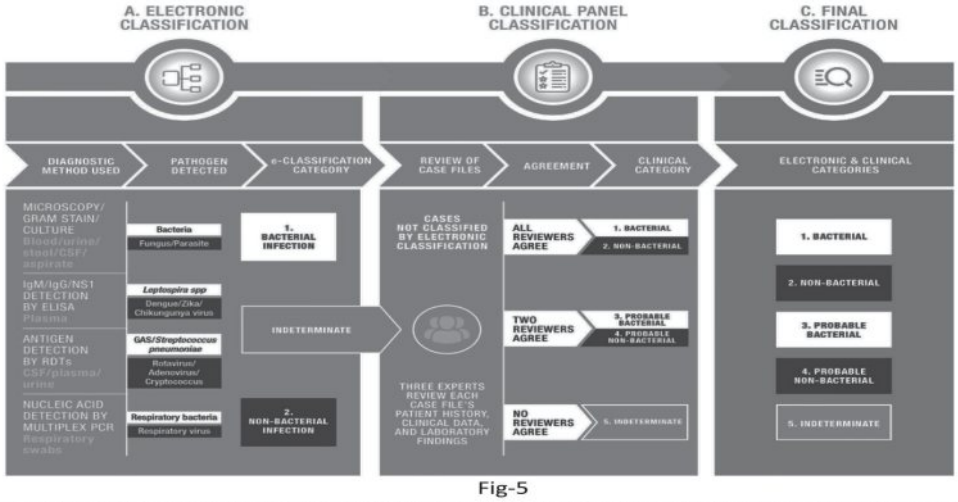

Fig-5

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Strategic solutions include:

- Investment in affordable, point-of-care diagnostics.
- Development of context-specific treatment algorithms.
- Strengthening epidemiological surveillance and data sharing across borders.
- Rational antibiotic use through stewardship programs.
- Community education on prevention strategies, especially vector control and hygiene practices.

Conclusion

AUFI is a globally relevant syndrome that mirrors the evolving landscape of infectious diseases. Its nonspecific presentation, wide etiological spectrum, and diagnostic complexity make it a formidable challenge for clinicians and policymakers alike. The burden is greatest in resource-limited settings, but globalization ensures its impact is felt worldwide. Combating AUFI requires a multidisciplinary approach—strengthening diagnostics, rationalizing treatment, enhancing surveillance, and addressing the broader determinants of infectious disease spread. Recognizing AUFI not as a single disease but as a dynamic clinical and epidemiological entity is essential to safeguard health systems in the 21st century.

References

1. Joshi R, Colford JM, Reingold AL, Kalantri S. Nonmalarial acute undifferentiated fever in a rural hospital in central India: diagnostic uncertainty and overtreatment with antimalarial agents. *Am J Trop Med Hyg.* 2008;78(3):393–399.
2. Crump JA, Kirk MD. Estimating the burden of febrile illnesses. *PLoS Negl Trop Dis.* 2015;9(12):e0004040.
3. World Health Organization. *Dengue and severe dengue: global epidemiology.* WHO; 2023.
4. Reller ME, Bodinayake C, Nagahawatte A, et al. Unsuspected rickettsioses among patients with acute febrile illness, Sri Lanka, 2007. *Emerg Infect Dis.* 2012;18(1):117–123.
5. Prasad N, Murdoch DR, Reyburn H, Crump JA. Etiology of severe febrile illness in low- and middle-income countries: a systematic review. *PLoS One.* 2015;10(6):e0127962.
6. Thangaraj JWV, Vasanthapuram R, Kukreti H, et al. Scrub typhus and other rickettsial infections in India: epidemiology, diagnosis and management. *Indian J Med Res.* 2021;154(6):829–846.
7. World Health Organization. *World Malaria Report 2023.* WHO; 2023.
8. GBD 2019 Diseases and Injuries Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019. *Lancet.* 2020;396(10258):1204–1222.

Diagnostic Algorithm for Bacterial Etiology of Acute Unidentified Febrile Illness

Prof. Rajashree Panigrahi
Professor, Department of Microbiology
SUM Hospital, Bhubaneswar

Introduction

Acute Unidentified Febrile Illness (AUFI) constitutes a prevalent clinical dilemma, particularly in tropical and subtropical locales where numerous bacterial, viral, and parasitic infections coalesce. The prevalent etiologies of AFI encompass enteric fever, brucellosis, leptospirosis, rickettsiosis, scrub typhus, melioidosis, and Q fever. Inappropriate or empirical antibiotic intervention prior to definitive diagnosis frequently culminates in antimicrobial resistance and diagnostic postponement. Consequently, a systematic diagnostic algorithm is imperative to direct clinicians towards prompt identification, judicious testing, and optimal management.

Typhoid

Typhoid and paratyphoid fever are systemic infections caused by *S. Typhi* or *S. Paratyphi*A. Pyrexia and rash are key symptoms of typhoid. Diagnosis is confirmed by pathogen isolation and antimicrobial susceptibility testing through blood culture. Results take two to three days, necessitating empirical antimicrobial therapy. *Salmonella typhi*, a gram-negative bacillus, is the primary cause of enteric fever and global morbidity and mortality. The WHO estimates 11 to 21 million cases of typhoid fever globally, leading to 128,000 to 161,000 deaths annually. Blood cultures, considered the diagnostic gold standard, should ideally be performed within a week of symptom onset. Substantial blood samples enhance culture results. Detection of *S. Typhi*-specific IgM antibodies serves as a recent infection biomarker, identifiable 2 to 3 days post-symptom onset. PCR amplification of *S. Typhi* genomic targets from patient blood has recently been developed.

Melioidosis

B. pseudomallei causes melioidosis, a severe septicemic infection that can progress to chronic conditions, including abscesses and pneumonia mimicking tuberculosis. Infection occurs through inhalation of contaminated dust, ingestion of tainted water, or direct contact with contaminated soil. Melioidosis is often underdiagnosed and misidentified as tuberculosis, leading to higher mortality rates. *B. pseudomallei* is found in soil and water, prevalent in tropical and subtropical regions. The disease is endemic in Southeast Asia, Northern Australia, and parts of the Indian subcontinent, with India expected to have the highest incidence. Most melioidosis cases occur in low- and middle-income countries. The infection can spread from the skin to the bloodstream, potentially causing chronic degeneration affecting multiple organs.

Conventional diagnosis of *B. pseudomallei* through blood culture and serological methods is limited to a few hospitals and laboratories.

Brucellosis

Brucellosis is an important yet underestimated zoonotic disease with worldwide occurrence. It causes significant economic losses for those in the livestock industry. Humans acquire the disease through contact with infected animals, tissues, or contaminated food products. The disease is caused by *Brucella* spp., which includes seven terrestrial and at least two marine species. The terrestrial species are *B. abortus, B. melitensis, B. suis, B. ovis, B. canis, B. neotomae,* and the newly discovered *B. microti*. Human infections can be caused by four main species: *B. abortus, B. melitensis, B. suis, and B. canis.* In India, where cattle farming is common, *B. abortus and B. melitensis* are known to cause acute febrile illnesses. Annually, there are around 500,000 global cases, with approximately 2.4 billion individuals exposed to risk. The entire population is vulnerable. The average prevalence in high-risk groups in India is roughly 8.5%. Clinical symptoms of systemic brucellosis are often non-specific, including fever, fatigue, sweating, muscle pain, joint pain, lower back pain, and reduced appetite. Diagnosis of brucellosis globally is performed through blood and bone marrow cultures or serological tests. The Brucella Serum agglutination test (SAT) is used, although it has lower sensitivity and specificity. PCR tests may provide better diagnostic accuracy for human brucellosis than blood cultures or traditional serological tests. As most human cases arise from consuming contaminated dairy, prevention involves ensuring dairy livestock are free from brucellosis.

Rickettsiosis

Rickettsiosis encompasses a range of diseases primarily caused by Rickettsia species, which are obligate intracellular bacteria. The Rickettsiaceae family includes various organisms characterized by their intracellular growth and transmission via blood-feeding arthropods, such as ticks, lice, fleas, and mites. These invertebrates can infect vascular and reticuloendothelial cells in humans. The Rickettsiaceae family consists of three genera: *Rickettsia, Orientia, and Ehrlichia*. Untreated rickettsial infections can have mortality rates of 30-35%, but they are often treatable when diagnosed properly. Rickettsia is a Gram-negative obligate intracellular bacterium within the alphaproteobacterial class in the order Rickettsiales, contributing to various vector-borne diseases. Two main groups of concern are the Spotted Fever Group and the Typhus Group. Generally, about 1-3% of ticks carry *R. rickettsii*, even in areas with high human case reports. Serological analysis is the primary method for identifying Rickettsia, while culture techniques offer higher specificity for detection. Many rickettsial diseases go undiagnosed due to limited diagnostic tools. PCR techniques for detecting Rickettsia spp. in clinical samples include nested PCR and real-time PCR.

Leptospirosis

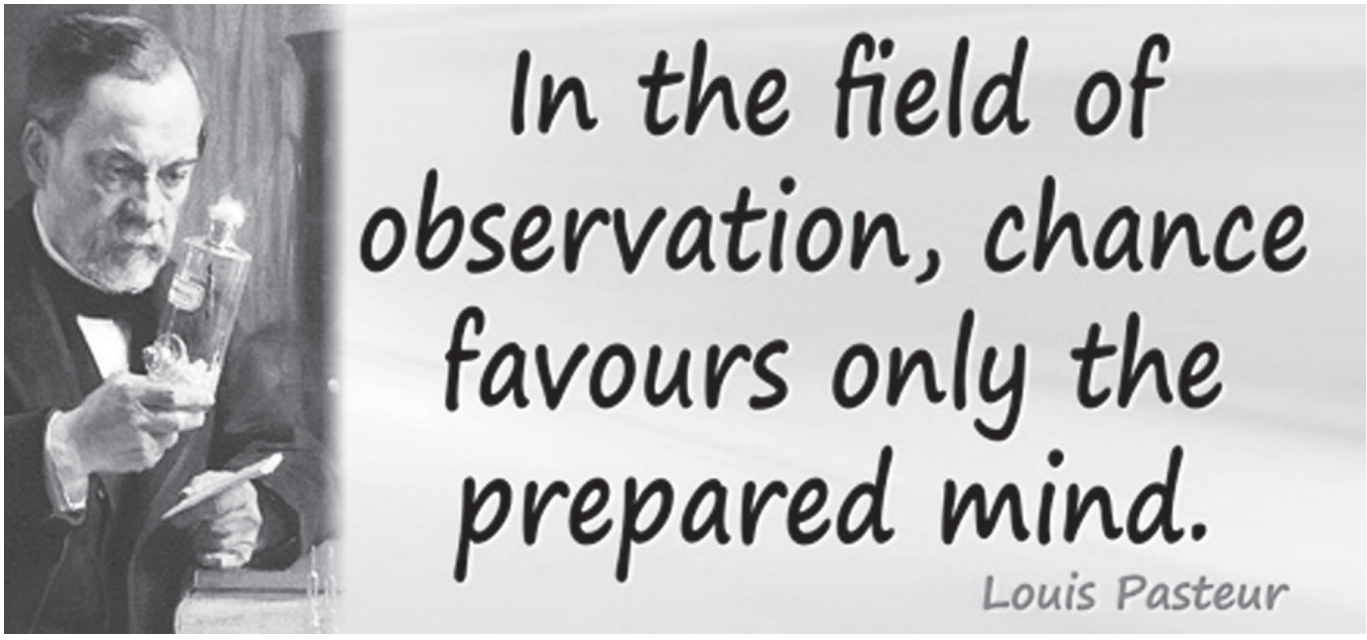
Leptospirosis is prevalent in mammals and transmitted to humans via contact with infected animals or contaminated water or soil. The genus Leptospira includes both pathogenic and non-pathogenic species. The disease is re-emerging in urban India during the rainy season due to inadequate sanitation and drainage. Epidemics are frequently reported in India, especially in the rainy season. Symptoms of leptospirosis vary widely, from asymptomatic to nonspecific signs like fever and muscle aches. Diagnosis typically occurs through serological tests such as IgM ELISA or Microscopic Agglutination Test (MAT). Leptospira persists in

the bloodstream until cleared 4-7 days post-antibody production, primarily IgM. PCR is a sensitive and specific method during the acute phase, detecting cases missed by serological tests.

Scrub typhus

O. tsutsugamushi is an obligate intracellular pathogen from the Rickettsiaceae family that causes scrub typhus. Untreated scrub typhus can lead to severe complications and death. It is the most common re-emerging Rickettsial infection in India and Southeast Asia. Mite larvae and chiggers transmit pathogenic bacteria to humans via bites. The prevalence of scrub typhus varies significantly between countries. Scrub typhus accounts for 25.3% of acute undifferentiated febrile illnesses, with 34.2% prevalence in certain communities. Diagnosis of scrub typhus is challenging in low-resource settings like India. Serological confirmation typically utilizes the Weill-Felix test, which is specific but less sensitive. Anti-O. tsutsugamushi IgG and IgM antibodies can be quickly detected via ELISA kits, although these may have availability and cost issues. PCR for *O. tsutsugamushi* protein genes is a reliable detection method.

AUFI significantly contributes to global morbidity and mortality in both children and adults. Over the past two decades, there has been a dramatic emergence of viral, bacterial, and parasitic infections. This includes new pathogens and those previously thought to be under control.



Current Perspective in Diagnosis of AUFI due to Viruses

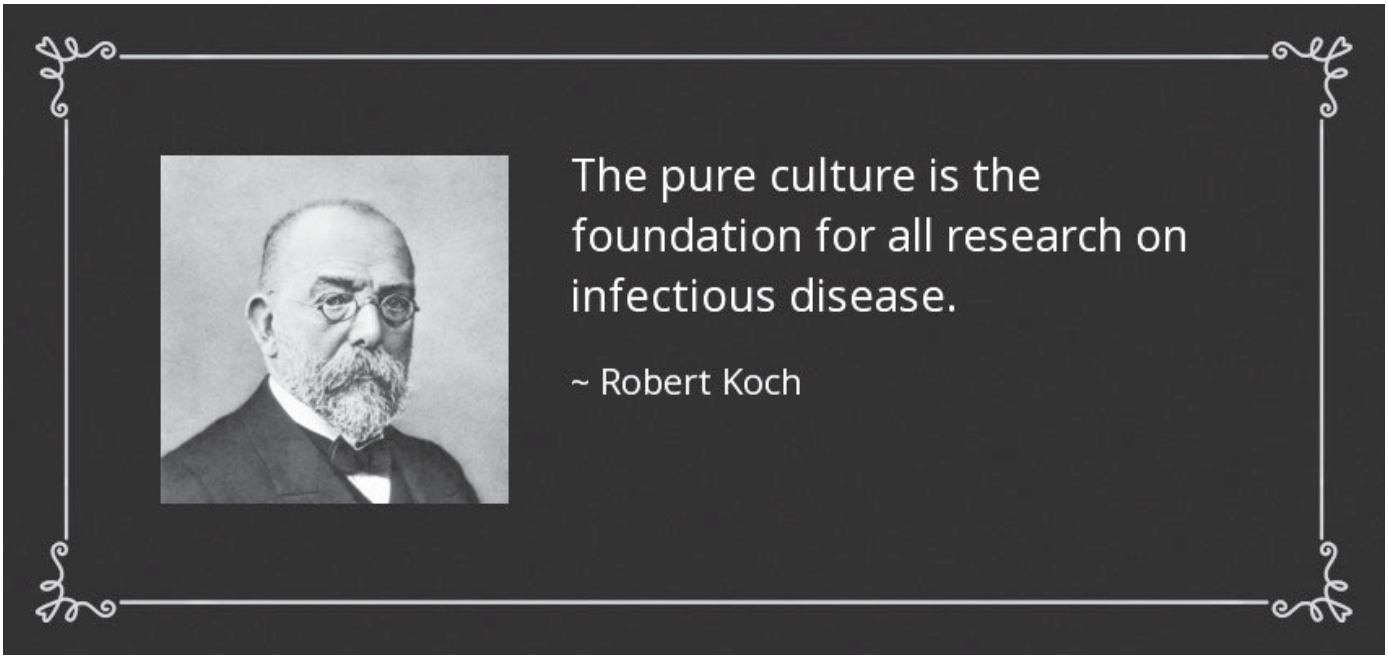
Prof R K Ratho
Professor and Head, Department of Virology, Dean (Academics),
Post Graduate Institute of Medical Education and Research, Chandigarh.

ABSTRACT

Acute Febrile Illnesses (AFIs) contribute to a high percentage of outpatient department visits as well as hospital admissions in both adult and pediatric population in tropical countries including India, with varied etiology depending upon geographical variations, vector epidemiology, seasonality and environmental factors. However, with increasing travel, urbanization and changing climatic factors, epidemiology of AFIs in India is evolving, and outbreaks are being reported periodically. Acute undifferentiated febrile illness (AUFI), acute fever with rash and acute fever with lymphadenopathy are three major forms of AFI which require special attention due to increased proportion of undiagnosed cases. AUFI is defined as a fever of >38.3ºC for more than 2 days and lasting for up to 14 days without organ or system-specific signs at the onset, and has been linked to high rates of hospital admission, particularly in children. Etiological agents with epidemic potential can be causative agents of AUFI in localized outbreaks which can progress to epidemics or even pandemics. Studies from India on epidemiology of AUFI reflected that dengue, scrub typhus and malaria constitute 50%-60% of all AUFI cases with differences in positivity rates based on geographical locations and seasonality. In South and Southeast Asia, Dengue fever accounts for 11.8% of cases of Acute Febrile illness. In the case of dengue fever, which is a mosquito-borne viral illness, it's important to manage the patient's condition carefully. Hospitalization and supportive care are often necessary, as severe cases of dengue can be life-threatening. Climate change and global warming alters the geographic distribution of vector-borne diseases especially arboviruses, expanding their outreach which necessitates constant surveillance both in humans as well as vectors including mosquitoes for the prevalence of Dengue, Chikungunya, Zika, Japanese Encephalitis etc.

Dengue with circulating 4 serotypes in majority of infections being asymptomatic. However, in some cases, a moderate fever can progress to typical DHF and/or DSS. Classical DF presents as an acute illness that typically manifests 4-10 days after being bitten by an infected mosquito. Common symptoms include high fever (up to 40 °C), severe headache, retro-orbital discomfort, malaise, intense joint and muscle pain, nausea, vomiting, and the appearance of a rash around 3-4 days after the onset of fever. Following initial infection, the individual develops immunity to that specific dengue serotype. However, during the defervescence phase, the patient's condition can rapidly deteriorate, leading to bleeding with or without

vascular leakage. Symptoms may include bleeding, thrombocytopenia (platelet count <100000/ìL), ascites, pleural effusion, elevated hematocrit levels, severe abdominal pain, restlessness, vomiting, and a sudden drop in temperature accompanied by profuse sweating.While virus isolation has been the traditional approach for diagnosing DENV infection, IgM ELISA testing, reverse-transcription polymerase chain reaction (RT-PCR) and more recently, NS1 antigen-capture enzyme-linked immunosorbent tests (ELISAs) have become increasingly utilized for faster diagnosis.When interpreting the serological test results, it should be borne in mind that cross-reactions with other flaviviruses (West Nile, Japanese encephalitis, Zika) are possible, both in the presence of infection and after active immunization, and secondary infections can produce discrepant results [PMID: 30696575].Rapid tests have meanwhile been developed for the combined identification of NS1 and dengue IgM/IgG in blood but have a lower sensitivity and specificity compared with laboratory-based test procedures [PMID: 39297280]. Study from Punjab indicated a positivity of dengue infection in about 68% where as Chikungunya is > 34% [PMID: 30498319]. Accurately predicting the future of dengue in the context of climate change is crucial for governments and public health experts to implement timely and preventive measures against outbreak situations; thus establishing prediction model looking into the temperature, humidity, vector positivity and serotype circulation would be very essential for future outbreaks as well as the preventive measures thereof. Most cases of AUFI due to viruses are diagnosed based on signs and symptoms alone, creating substantial uncertainty due to the non-specific and non-uniform case definitions used. Even when diagnostic methods are used, each diagnostic tests suffer due to variations in accuracy depending on the methodology/kit and epidemiological context. This carries significant consequences, as diagnostic strategy needs to be tailored to regional situations pertinent to India.



Exploring the Underestimated and overlooked Organisms

Dr. Nipa Singh
Professor, Department of Microbiology
KIMS, Bhubaneswar

ABSTRACT

Acute undifferentiated febrile illness (AUFI), is a medical condition characterized by a sudden onset of fever (e"38°C or e" 100.4°F) that lasts for less than 2 weeks and cannot be attributed to a specific cause after a thorough clinical evaluation and appropriate laboratory testing. (1)

A systematic review by Wangdi K etal regarding the aetiology of AUFI in South and South east Asia (2), illustrates that in adults, the leading cause is bacterial infection (26.1%), followed by viral aetiologies (18.6%).(2) Globally, etiologies differ by region and the common etiologies contributing to AUF in Indiaare dengue (31.5%), COVID-19 (18.5%), enteric fever (12.7%), scrub typhus (9.0%), and malaria (6.0%) with the rest being undiagnosed. (3).

Parasitic and fungal causes of AUFI is often under recognised due to the perceived epidemiological rarity as most of the cases are attributed to bacterial and viral causes.Diagnostic challenges also pose a hindrance as limited laboratory infrastructure and high costs of advanced tests sideline fungal/ parasitic causes investigations unless the case is severe or refractory.

PARASITIC CAUSES OF ACUTE UNDIFFERENTIATED FEBRILE ILLNESS IN INDIA

Malaria

Malaria is the most significant parasitic cause of AUFI in India.Despite declining incidence due to intensified control programs,India still accountsforalarge proportionofglobal malaria cases,primarily *Plasmodium falciparum* and *Plasmodium vivax* (WHO, 2023).(4) Malaria often presents as non-specific fever, sometimes without classical periodicity, making it indistinguishable from bacterial or viral fevers at initial presentation. Severe manifestations such as cerebral malaria, acute renal failure, or severe anemia occur especially with *P. falciparum*. Rapid diagnostic tests (RDTs) and microscopy remain the cornerstone of diagnosis, while PCR-based assays provide higher sensitivity in reference centers.

Visceral Leishmaniasis (Kala-azar)

Visceral leishmaniasis caused by *Leishmania donovani* is endemic in Bihar, Jharkhand, West Bengal, and parts of Uttar Pradesh. Patients often present with prolonged fever, hepatosplenomegaly, and pancytopenia, but in early stages kala-azar may manifest as AUFI without organomegaly. rk39 antigen-

based immunochromatographic tests have revolutionized point-of-care diagnosis, although confirmatory splenic or bone marrow aspiration remains gold standard. Co-infection with HIV has complicated the clinical picture and therapeutic outcomes in some regions.(5)

Amoebic Liver Abscess

In endemic areas, *Entamoeba histolytica* can cause liver abscesses presenting initially as fever without localizing signs. Patients may have fever, right upper quadrant discomfort, and hepatomegaly, but occasionally early cases resemble AUFI. Ultrasound and serology aid in diagnosis. Since bacterial pyogenic liver abscesses can mimic amoebic abscess, accurate identification is crucial. (6)

Other Protozoal Infections

Babesiosis, though rare in India, has been reported sporadically in northeastern and southern regions, mainly in immunocompromised patients. It causes febrile hemolytic illness resembling malaria. Trypanosomiasis is not endemic in India but imported cases are possible.

Helminthic Infections

Some helminthic diseases can present with febrile syndromes. Acute schistosomiasis (Katayama fever) has not been widely reported in India, but *Strongyloides stercoralis* hyperinfection may present with unexplained fever in immunocompromised individuals. Filarial infections typically cause chronic manifestations, but acute filarial fever with lymphadenitis may occasionally mimic AUFI.

Diagnostic Challenges in India

Microscopy has traditionally been the cornerstone for diagnosing parasitic infections, particularly in resource-limited settings. Light microscopy of blood smears, stool samples, and tissue biopsies allows direct visualization of parasites, providing species-level identification in many cases. It remains inexpensive, rapid, and widely accessible. However, its sensitivity is highly dependent on parasite load and operator expertise. For example, low parasitemia in malaria or intermittent shedding of ova in helminth infections may lead to false negatives. Moreover, morphological similarities between species can result in misidentification.

Molecular diagnostic techniques, particularly polymerase chain reaction (PCR)-based assays, have revolutionized parasitology by offering high sensitivity and specificity. They can detect low parasite burdens, mixed infections, and differentiate morphologically similar species, such as *Entamoeba histolytica* from non-pathogenic *Entamoeba dispar*. Real-time PCR, multiplex assays, and next-generation sequencing further enhance diagnostic accuracy and allow quantification of parasite load.

Despite their advantages, molecular tests require advanced infrastructure, skilled personnel, and are cost-intensive, limiting routine use in many endemic regions. Thus, microscopy continues to be the primary diagnostic tool, while molecular methods serve as complementary approaches, especially in reference laboratories and research settings. (7)

Strengthening laboratory diagnostic capacity, especially for malaria and kala-azar, remains a public health priority. Point-of-care rapid tests, coupled with clinical suspicion in endemic regions, are essential for timely management.

FUNGAL CAUSES OF ACUTE UNDIFFERENTIATED FEBRILE ILLNESS IN INDIA

Histoplasmosis

Histoplasma capsulatum is a dimorphic fungus endemic in parts of eastern and northeastern India. Several case series from West Bengal, Bihar, and Assam highlight histoplasmosis presenting as fever with hepatosplenomegaly or pancytopenia, often mimicking malaria, kala-azar, or tuberculosis.(8) In HIV/AIDS and transplant recipients, disseminated histoplasmosis often presents initially as AUFI.

Candidemia

Bloodstream infections with *Candida* are among the most common nosocomial fungal infections in India. Persistent unexplained fever in ICU or post-surgical patients should raise suspicion. Large multicenter studies (9) report candidemia as a leading cause of healthcare-associated fungemia, often unresponsive to antibiotics.

Aspergillosis

Invasive aspergillosis typically presents with pulmonary involvement, but in neutropenic and transplant patients, prolonged fever without localizing signs may be the only initial clue. Indian cancer centers have reported rising incidence in hematological malignancies. (10)

Penicilliosis (Talaromycosis)

Although mainly endemic in Southeast Asia, sporadic cases of *Talaromyces marneffei* have been reported from northeast India. Patients present with prolonged fever, hepatosplenomegaly, and lymphadenopathy, closely resembling disseminated tuberculosis or kala-azar. (11)

Diagnostic Approaches

- **Conventional methods**: Direct microscopy and culture from blood, bone marrow, or tissue remain diagnostic standards, though slow and insensitive in some cases.
- **Antigen detection**: Cryptococcal antigen (CrAg) lateral flow assay is widely available in India and provides rapid diagnosis. Histoplasma antigen testing is sensitive but not routinely accessible. Galactomannan and (1'!3)-â-D-glucan assays aid in diagnosing invasive aspergillosis and candidemia, though limited to tertiary centers.
- **Molecular techniques**: PCR-based assays offer high sensitivity but are not widely standardized in Indian laboratories.
- **Histopathology and Imaging**: Tissue biopsies with fungal stains (PAS, GMS) and imaging modalities help confirm invasive fungal disease when cultures are negative.

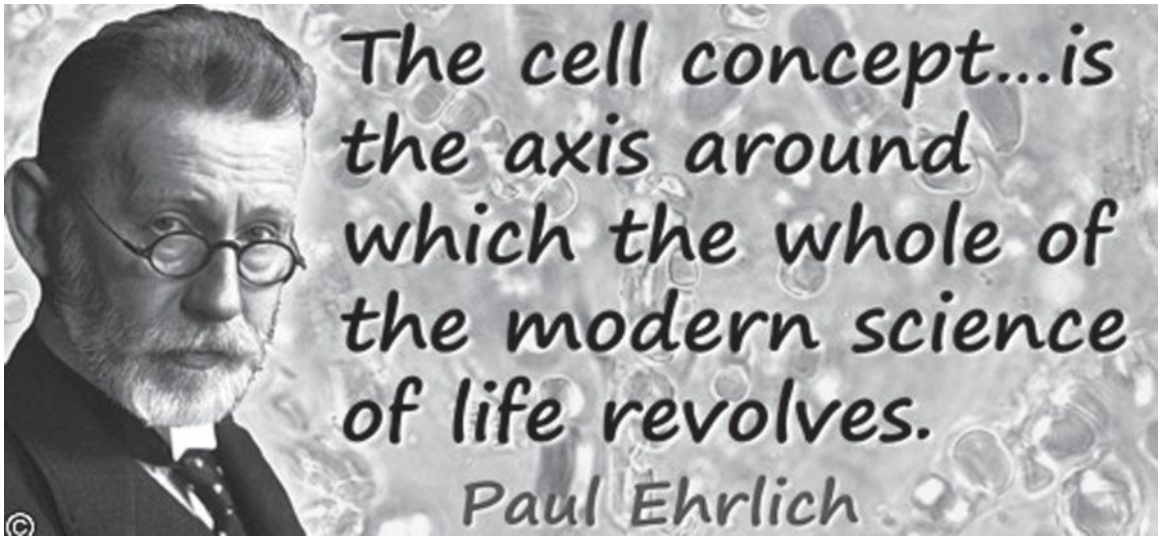
Rising HIV prevalence, widespread corticosteroid use, ICU care, and solid organ/stem cell transplantation have increased the risk of invasive mycoses. Reports from India emphasize that histoplasmosis and cryptococcosis are important opportunistic infections in HIV cohorts, while candidemia remains a leading cause of healthcare-associated fever. Limited access to fungal diagnostics outside tertiary hospitals contributes to underrecognition and underreporting.

References

1. Barathan M. From fever to action: diagnosis, treatment, and prevention of acute undifferentiated febrile illnesses. Pathog Dis. 2024 Feb 7;82:ftae006. doi: 10.1093/femspd/ftae006. PMID: 38614961;

PMCID: PMC11067964.

2. Wangdi K, Kasturiaratchi K, Nery SV, Lau CL, Gray DJ, Clements ACA. Diversity of infectious aetiologies of acute undifferentiated febrile illnesses in south and Southeast Asia: a systematic review. BMC Infect Dis. 2019 Jul 4;19(1):577. doi: 10.1186/s12879-019-4185-y. PMID: 31272417; PMCID: PMC6610835
3. Govindaraj V, Poonia D, Bhardwaj G, *et al.* Identifying the Probable Etiology of Acute Undifferentiated Fever through Inflammatory Markers. J Assoc Physicians India 2024;72(5):13-16
4. World Health Organization. *World Malaria Report 2023*. Geneva: WHO; 2023
5. Sundar S, Chakravarty J. An update on pharmacotherapy for leishmaniasis. *Expert Opin Pharmacother*. 2015;16(2):237–252.
6. Haque R, Huston CD, Hughes M, Houpt E, Petri WA Jr. Amebiasis. *N Engl J Med*. 2003;348(16):1565–1573.
7. Haanshuus CG, et al. *Clin Microbiol Rev*. 2019;32(1):e00019-18.
8. Gopalakrishnan R, Nambi PS, Ramasubramanian V, Abdul Ghafur K, Parameswaran A. Histoplasmosis in India: truly uncommon or uncommonly recognised?. *J Assoc Physicians India*. 2012;60:25-28.
9. Chakrabarti A, et al. "Epidemiology and clinical outcomes of invasive candidiasis: A multicenter study in India." *Int J Infect Dis.* 2011;15(9):e593–e600.
10. Mehta P, et al. "Invasive aspergillosis in haematological malignancies: Experience from an Indian tertiary care center." *Mycoses.* 2017;60(6):386–393.
11. Singh PN, et al. "Disseminated Penicillium marneffei infection in an HIV-infected patient in India." *Med Mycol.* 2010;48(7):996–999.



Unravelling the Mystery of AUFI; Recent Advances and Future Direction

Dr Bijayini Behera
Professor, Department of Microbiology,
All India Institute of Medical Sciences, Bhubaneswar

ABSTRACT

Acute undifferentiated febrile illness (AUFI) is defined as any febrile illness with a duration of 14 days without evidence of localized infection. Most outpatient services and a significant inpatient load in India are contributed by AUFI. In a large proportion of AUFI cases, a laboratory confirmed diagnosis cannot be made (median 39.6%, IQR 33.9-47.2%) although there is variability in the reported literature (range 3.2-65. 0%). Patients with undiagnosed AUFI may recover with broad spectrum therapy and some may continue to be febrile for over 21 days and subsequently fit the case definition for FUO. The need to distinguish between the two lies in the differing aetiology of fever in each group. In AUFI where a cause is identified, this is most likely to be attributable to infection, whereas the majority of diagnosed FUO is attributed to systemic inflammatory conditions or malignancy. Gaining a clinically credible microbiological diagnosis in patients with AUFI is essential for three key reasons; to guide patient management, prevent unnecessary antimicrobial use and prevent the onwards transmission of infectious diseases.

In the absence of geographically appropriate testing algorithms that can be implemented with the currently available diagnostic tests for the etiological diagnosis of AUFI, a sequential tiered, multi-modal diagnostic workflow can be implemented at individual facility.

1. Point of care tests, based on host response biomarkers, can be used to differentiate bacterial vs viral infections, thus reducing the number of unnecessary empirical antibiotic prescriptions. For example, in vitro diagnostic tests that measure blood concentrations of three host proteins: tumor necrosis factor-related, apoptosis-inducing ligand (TRAIL), interferon gamma inducible protein-10 (IP-10) and C-reactive protein (CRP) [the FDA approved MeMed ImmunoXpert, MeMed BV] score better and beyond the traditional single, currently available nonspecific tests such as the erythrocyte sedimentation rate (ESR), C-reactive protein (CRP) and procalcitonin (PCT).
2. Commercially available multiplex PCR panels for tropical fever . There are at least five-six multiplex PCR panels available for evaluation of fever, however only BIOFIRER FILMARRAYR Tropical Fever (TF) Panel targeting six analytes, e.g., Dengue virus (serotypes 1.4), Leptospira spp., Plasmodium spp., Plasmodium falciparum, Plasmodium vivax/ovale, has received FDA 510(k) Special clearance. Performance claims of many of these panels appear limited to manufacturer data or promotional materials, and independent evaluations remain scarce. The economic evaluation of tropical fever

multiplex PCR panels is crucial for assessing their feasibility and impact, especially in resource-limited settings like India.

3. Sequence-based diagnostics in the evaluation of undiagnosed AUFI- Sequence-based testing is an important diagnostic adjunct to consider for immunocompromised patients, or for certain syndromes (e.g. sepsis, meningitis/encephalitis, and opportunistic pneumonia etc). Metagenomic next-generation sequencing of plasma microbial cell-free DNA (mcfDNA) for the detection of pathogens associated with undiagnosed AUFI, is particularly helpful in evaluation of fever in neutropenic patients/high index of suspicion of opportunistic infections/imaging suggestive of endocarditis or deep seated abscess, when invasive sampling is difficult. mcfDNA represents circulating short fragments of microbial DNA, and quantitative results are provided as molecules per microliter, with microorganisms reported if the plasma mcfDNA exceeds an organism-specific threshold. Hogan et al has published standardized criteria for assessment of clinical impact (Positive, neutral and negative) of metagenomics NGS. Overall, the clinical impact of metagenomics NGS has varied widely across studies (range 7.80%). Additional research is needed to determine where mNGS fits in current diagnostic algorithms of AUFI, and to understand the highest yield clinical syndromes, optimal timing of mNGS and its added value.
4. Host Response and Transcriptomics- Metagenomic next-generation sequencing strategies often identify organisms of uncertain clinical significance and fails to distinguish invasive organisms from colonizers, especially when testing from nonsterile sites. Transcriptomic profiling of the host immune response is a complementary method to mNGS and early proofof- concept studies suggest that integrated host Transcriptomics and microbe mNGS profiling using improves diagnostic predictive value for lower respiratory tract infection

A tiered diagnostic workflow should be implemented for evaluation of AUFI, starting with rapid, costeffective POCT as the first-line screening tool to distinguish to differentiate bacterial vs viral infections. Battery of RDT and serological tests for common geographically prevalent infectious diseases perform equally or even better than commercially available multiplex PCR panels for tropical fever. If the patient's illness remains undiagnosed or progresses to severe diseases, the diagnosis should then be escalated to more advanced genomic methods, such as metagenomic next-generation sequencing of plasma microbial cell-free DNA for broad pathogen detection. This approach optimizes resource allocation and ensures that the most comprehensive tools are used for the most complex cases.

LIST OF PRESENTATIONS

SL. NO.	CODE NO.	NAME	TOPIC
ORAL PRESENTATIONS AWARD CATEGORY			
1.	OP-01	Dr. Amit Kumar Nayak	Detection of Carbapenem Resistance among Klebsiellapneumoniae isolates from Neonatal Bloodstream Infections and Its Implications for Antimicrobial Stewardship.
2.	OP-02	Dr. NehaSahu	Study Of In-Vitro Activity of anovel Carbapenem - BIAPENEM
3.	OP-03	Dr. Priyanka Mahapatra	Microbial profile and susceptibility pattern of infections in patients with SLE and correlation with disease activity.
4.	OP-04	Dr. SoumyaMohanty	A study on clinical, microbiological and serological analysis of pulmonary aspergillosis at a tertiary care hospital.
5.	OP-05	Dr NishikantaSahoo	Comparison of different methods for in vitro susceptibility testing of colistin in Gram negative bacilli among patients admitted in Hi-Tech Medical College and Hospital, Bhubaneswar.
6.	OP-06	Dr NishikantaMuduli	Synergistic combination of Ceftazidime/Avibactam with Aztreonam against Carbapenem resistant Klebsiellapneumoniae in ICU patients.
7.	OP-07	Dr Soumya Shubhadarshini Samal	Susceptibility pattern of carbepenem resistant non fermenters in ICU set up of a tertiary care hospital.
8.	OP-08	Dr. Mohammed Abdul Mazid	Prevalence of Chlamydial cervicitis in women of reproductive age group with vaginal discharge- a hospital based study.
9.	OP-09	Dr Sarada Priyadarshini	Microbiological Perspective of Fungal Rhinosinusitis: A Cross-Sectional Study
10.	OP-10	Dr ManaswiniPatro	A study on the microbiological profile of upper respiratory tract infection with special reference to viruses in paediatric age group in a tertiary care hospital of eastern Odisha.

SL. NO.	CODE NO.	NAME	TOPIC
FREE PAPER CATEGORY			
1.	OP-11	Shubham Swagat Jena	A study on Serum Biomarkers and Bloodstream Infections.
2.	OP-12	Dr Siaryong Kalpana Aimol	HCV antibody detection by ELISA in the diagnosis of Hepatitis C virus infection in a tertiary care hospital.
3.	OP-13	Dr PrajnaNayak	Association of follow up blood culture with clinical outcome in patients of Blood stream infection in a tertiary care hospital.
4.	OP-14	Dr. Sonia Pradhan	Antibiotic Profile of K.Pneumoniae Isolates from Endotracheal Aspirates in a Tertiary Care Hospital.
5.	OP-15	Dr. Tushar Ranjan Panda	Clinico-etiological study of urethritis among patients in a tertiary care hospital
6.	OP-16	Dr Sidhanta Kumar Behera	A study on Hospital Acquired Infections in Central Intensive Care Unit of a tertiary care hospital, Western-Odisha.
7.	OP-17	Deba Prasad Mishra	Incidence, Risk factor, microbiological profile and Antibiotic Susceptibility pattern of Ventilator-associated pneumonia in a Tertiary care Hospital, Odisha.
8.	OP-18	Dr Bijayalaxmi Patra	Incidence, Duration of Stay, and Clinical Outcomes of MDR Infections in ICU Patients: A Prospective Observational Study.
9.	OP-19	Dr Jyotsna Padhan	A study On Microbiological Profile & AST of Diabetic Foot Infection with special reference to drugs resistance strain in a tertiary Care Hospital.
10.	OP-20	Dr. Nagendhira Raju	From Vein to VITEK: A Comparative Study of Direct versus Conventional Culture- Based VITEK Identification and Susceptibility Testing with Turnaround Time Analysis.
11.	OP-21	Dr Swayam Swastik Sahoo	Evaluating the Effectiveness of Fosfomycin in Treating Escherichia coli Infections: A Focus on Urinary Tract Infections.
12.	OP-22	Dr. Vijaylaxmi Hansdah	Clinicomycological study of Superficial mycoses among the patients attending a tertiary care hospital in eastern Odisha.
13.	OP-23	Dr. Pratikshya Mahapatra	Subcutaneous Phaeohyphomycosis by Medicopsisromeroi in a Diabetic Patient from a long-standing traumatic Lesion: An Unusual Emerging Fungal threat.
14.	OP-24	Dr. Roshni Dandapat	Hansen's Disease Revisited: Chronic Lepromatous Leprosy presenting with Erythema Nodosum Leprosumnecroticans and Lucio Phenomenon.

SL. NO.	CODE NO.	NAME	TOPIC
		POSTERS PRESENTATIONS	
1.	PP-01	Dr Siddhant Ray	From flora to flesh: Odisha's first documented case of human pestalotiopsis infection
2.	PP-02	Dr Shibashis Sahoo	Unmasking Leptospirosis: A case of misdiagnosed febrile illness
3.	PP-03	Dr Swapnarani Patel	Evaluation of direct sputum smear examination with smear examination after petroff method and NALC-NaoH method for detection of Tuberculosis, a comparative study.
4.	PP-04	Dr Smita Mohanty	Post-surgical wound infection by Mycobacterium fortuitum-chelonei complex - A Case Report
5.	PP-05	Dr Ashish Patel	Bacteriological Profile and Antimicrobial Susceptibility Pattern of Burn Wound Isolates: A Hospital-Based Observational Study.
6.	PP-06	Dr Ruchita Sahu	Elizabethkingiameningoseptica: Antimicrobial susceptibility pattern, Risk factor association and outcome in a tertiary care hospital.
7.	PP-07	Abhiseka Acharya	Rhino-Orbital Mucormycosis in an uncontrolled Type 2 Diabetic COVID-19 Patient : A case report from eastern Odisha
8.	PP-08	Sonali Priyadarshini	A case of Penicillin resistant Neisseria gonorrhoeae isolated from a young male with urethral discharge.
9.	PP-09	Priyanka Mandal	Bacteriological profile of pleural fluid in empyema thoracis in a tertiary care center.
10.	PP-10	Dr R Dhanush	Bacteriological profile of pleural fluid in empyema thoracis in a tertiary care center. Bacteriological profile and antibiogram of Aural Discharge.
11.	PP-11	Dr. Pratyush Ku. Pramanik	Prevalence and Antibiotic Sensitivity of Non-Lactose Fermenters causing Urinary Tract Infection among in-patients in VSSIMSAR, Burla.
12.	PP-12	Dr. Biswanath Satapathy	Bacteriological Profile of Endotracheal Tube Aspirate in Ventilator-Associated Pneumonia (VAP).
13.	PP-13	Dr Dolly Chhanda	Bacteriological profile and their antimicrobial susceptibility pattern in wound infections.
14.	PP-14	Dr Kavita Sharma	Double Trouble: Unraveling MTB and NTM Co-infections
15.	PP-15	Dr Lopamudra Mishra	Congenital Syphilis - A call for Vigilance
16.	PP-16	Dr Sushree Padmaja Pradhan	Co-Infection of Group A Streptococcus and Epstein Barr Virus in a patient presenting with acute Pharyngitis- An uncommon presentation.
17.	PP-17	Dr Srusti Dash	Clinical and bacteriological assessment of bloodstream infections in a tertiary care hospital of Odisha.

SL. NO.	CODE NO.	NAME	TOPIC
18.	PP-18	Dr Deepti Pradhan	Comparative Microbiological Evaluation of Endotracheal Aspirates and Tube Cultures in Mechanically Ventilated Patients- A Cross-Sectional Comparative Study.
19.	PP-19	Dr Manoswini Mallick	A study to evaluate Catheter associated Urinary tract infection(CAUTI) in Intensive Care Unit at a Tertiary Care Hospital.
20.	PP-20	Dr Deepshikha Lenka	When common presentations conceal uncommon diagnosis-pediatric case of Staphylococcal Scalded Skin Syndrome
21.	PP-21	Dr.Prachi Prabha Sahu	Immunization to infection - A rare case of Mycobacterium bovis isolated from Vaccination Site in Hyper IgE Syndrome.
22.	PP-22	Dr. Ankita Patra	Misleading the Gut: A Case of Chronic Giardiasis Camouflaged as Ileocolonic Ulcer with Lymphadenopathy in an Immunocompetent Patient.
23.	PP-23	Dr. Dikshya Bhuyan	Utility of Gram stain as a rapid bedside diagnostic tool in respiratory tract infections at a tertiary care center.
24.	PP-24	Dr Subhasish Saha	Escalating MIC: Silent path leads to Vancomycin Resistance - A retrospective study in a Tertiary care hospital in Odisha.
25.	PP-25	Dr Vishal Kumar Sahu	Incidence, Bacteriological Profile & Antibiotic Sensitivity Pattern of Ventilator Associated Pneumonia cases in ICU of Tertiary Care Hospital.
26.	PP-26	Noureen TV	Melioidosis; 'The great mimicker' with diverse presentations.
27.	PP-27	Shalin C Abraham	Fungal Ball with a Twist: Rare Streptococcus pneumoniae co infection in a Chronic Pulmonary Aspergillosis Patient.
28.	PP-28	Manjori Bhattacharyya	Serotype Distribution and Antimicrobial Resistance of Streptococcus pneumoniae in a Tertiary Care Teaching Hospital of Odisha.
29.	PP-29	TanwiMandal	Pyogenic Infections due to family Bacteroidaceae: a case-series from a tertiary-level hospital in Eastern India.
30.	PP-30	Ashok V	Persistent isolation of Achromobacterxylosoxidans from sputum in a paediatric patient with cystic fibrosis: Case report and Literature Review.
31.	PP-31	Jagannath Sridharan	Unusual Pathogen in a Vulnerable Host: Aeromonassalmonicida Bacteremia in Infant with B-ALL.
32.	PP-32	Ansupa Mishra	Uncommon but concerning: A case series of Chryseobacteriumindologenes associated with Ventilator-associated pneumonia in ICU patients
33.	PP-33	Dr Shruti Patel	Difficult-to-treat resistant gram-negative blood stream infections: Analysis of Prevalence and Outcome of Resistance to All First-line Agents

PAPERS FOR AWARD SESSION

OP 1:

Detection of Carbapenem Resistance among Klebsiella pneumoniae isolates from Neonatal Bloodstream Infections and Its Implications for Antimicrobial Stewardship

Dr Amit Kumar Nayak

PG Second year, MKCG MCH

Introduction:

Carbapenem-resistant Klebsiella pneumoniae (CRKP) has emerged as a major cause of neonatal sepsis in healthcare settings. The rapid identification of carbapenemase-producing isolates is crucial for informing timely therapeutic decisions and enhancing antimicrobial stewardship.

Objectives:

To detect the presence of carbapenemase and their genes (blaNDM, blaOXA-48, blaKPC, blaVIM and blaIMP) among Klebsiella pneumoniae isolates from neonatal bloodstream infections using molecular techniques, and to assess the clinical significance of early detection.

Methods:

A cross-sectional study was conducted on approximately 100 clinical K. pneumoniae isolates from neonatal blood cultures over 6 months in Southern Odisha. Phenotypic carbapenem resistance was detected using the Modified Carbapenem Inactivation Method (mCIM) and EDTA-modified CIM (eCIM) as per CLSI guidelines. Molecular detection of carbapenemase genes was performed using multiplex PCR. Data were analysed to correlate genotypic results with phenotypic resistance.

Results:

Out of 100 Klebsiella pneumoniae isolates from neonatal bloodstream infections, 45% were found to be carbapenem-resistant based on phenotypic methods. Among these, the production of metallo-ß-lactamase was predominant.

Conclusion:

This study aims to highlight the utility of rapid PCR-based methods for detecting carbapenemase genes in CRKP from neonatal sepsis cases. Timely genotypic diagnosis can improve clinical outcomes, limit the use of broad-spectrum antibiotics and strengthen antimicrobial stewardship strategies in neonatal intensive care units (NICUs).

OP 2:
Study of In-Vitro activity of a novel Carbapenem – BIAPENEM

Dr Neha Sahu

2nd year PG Student, MKCGMCH

Introduction:

The rising prevalence of multidrug-resistant (MDR) pathogens in hospitals necessitates novel therapeutic strategies. Biapenem, a novel carbapenem, recently approved by Drug controller of India for complicated urinary tract infection. It demonstrates distinct pharmacological advantages over Meropenem, Imipenem and Ertapenem, including stability against selected ß-lactamases and efflux pumps.

Objectives:

To determine the minimum inhibitory concentration of Biapenem against a panel of carbapenemase producing gram negative bacteria. Acinetobacter baumannii isolates display high MICs (32 µg/mL), reflecting resistance.

Material & Methods:

A total of 286 isolates of Enterobacterales , Pseudomonas aeruginosa and Acinetobacter spp were recovered from various clinical samples from clinical wards and intensive care units for a period of 6 months. The isolates were identifiedby VITEK 2 followed by AST to screen for carbapenemase production. The carbapenemase producing organisms (86) were tested for susceptibility to Biapenem ,Imipenem ,Meropenem and Ertapenem using MIC strips.

Results:

Biapenem shows very low MICs (0.047–0.5 µg/mL) i.e. 88.3% susceptible to Klebsiella pneumonaeisolates , 84.2% to Escherichia coli and 51.3% to Pseudomonas aeruginosa isolates whereas Acinetobacter baumannii isolates display high MICs (32 µg/mL), reflecting resistance.

Conclusion:

Biapenem demonstrates superior in vitro activity against majority multi drug resistant pathogens compared to legacy carbapenems. Its distinct pharmacological profile potentiates it to be used as an empirical or targeted therapy for multidrug resistant organisms.

OP 3:
Profile of infection and susceptibility pattern in patients with SLE and correlation with disease activity.

Dr Priyanka Mahapatra[1*], Dr Dharitri Mohapatra[1], Dr Saumya Ranjan Tripathy[2], Dr Soumya Sibani Sahoo[3]

[1]Department of Microbiology, S.C.B. Medical College & Hospital, Cuttack,
*[2]Department of Clinical Immunology & Rheumatology, SCBMCH, Cuttack, 3Department of Microbiology, SVPPGIP, SCBMCH, Cuttack, Odisha *Email: pandapinki47@gmail.com*

Background:

Systemic lupus erythematosus (SLE) is a multisystem autoimmune disorder with very high female predominance, typically affecting 15–40 years age group. Infection remains a leading cause of morbidity and mortality in SLE, driven by immune dysregulation and widespread use of immunosuppressants. Early identification of infection types and resistance patterns is critical for guiding in effective management.

Objectives:

To identify the spectrum of infections in SLE patients, analyse antimicrobial resistance pattern of the isolates and assess the correlation between infection and disease activity.

Methods:

This is a prospective study conducted among 108 hospitalised SLE patients, presenting with infectious symptoms. Clinical samples including blood, urine, sputum, and wound swabs were processed using standard microbiological techniques. Pathogen isolation (bacterial and fungal) was performed using conventional & automated methods, where relevant. Antimicrobial susceptibility testing was performed using CLSI-guided automated methods (VITEK-2) and manual disk diffusion. RT-PCR was done for detection of any viral pathogens from the serum sample. Correlation of infection profile and resistance pattern was analysed against SLE disease activity using SLEDAI scores, immunologic markers (C3, C4, anti-dsDNA), inflammatory markers (CBC, raised CRP, procalcitonin levels, etc) and immunosuppressive regimen data. Statistical analysis was done considering significant p-value (<0.05) to determine correlation between variables and association of infection with disease activity.

Results:

Out of 108 hospitalised SLE patients, 80 were clinically suspected to have infections, from which incidence of laboratory confirmed infection by one or more methods was found in 65% (52) cases. Bacterial (84.6%) pathogens were predominant over viral (40.4%) pathogens followed by fungal (31%) pathogens. Gram negative bacteria (GNB=81.8%) was found to be predominant over gram positive bacteria (GPB=9.1%). Escherichia coli (36.1%) was most frequently isolated bacteria followed by Klebsiella spp(30.5%), Pseudomonas spp(18.2%) and Acinetobacter spp(9.1%). Cytomegalovirus (76.2%) was most frequently detected among viral pathogens whereas, Candida albicans (81.5%) was most common among fungal pathogens identified. Among the bacterial isolates, 30% were detected to be multidrug resistant (MDR), all

of them being GNB. Disease activity is seen significantly higher in infected patients (SLEDAI score=31) as compared to patient without infection (SLEDAI score=17).

Conclusion:

Our study reveals a high prevalence of infection in hospitalized SLE patients, predominantly caused by multidrug-resistant gram-negative bacteria. The association between elevated disease activity scores and infection emphasises the impact of immune dysregulation in SLE. The notable incidence of viral infections highlights the need for targeted diagnostics and judicious antimicrobial use to curb resistance. Moreover, the emergence of fungal infections, often overlooked requires integrated infection surveillance strategies. These findings advocate for robust infection risk assessment and early intervention protocols to optimize outcomes in SLE management.

OP 4:
A study on clinical, microbiological and serological analysis of pulmonary aspergillosis at a tertiary care hospital

Dr. Soumya Mohanty, Dr. Dharitri Mohapatra, Dr. Bhabani Patnaik, Dr. Somi Patro, Dr. Manoranjan Dash.

Introduction-

Aspergillus is a ubiquitous fungus that can lead to a variety of clinical syndromes. Many people inhale its spores, only a small percentage(<2%) develop the disease. The clinical spectrum of pulmonary aspergillosis includes allergic bronchopulmonary aspergillosis (ABPA), chronic pulmonary aspergillosis (CPA), aspergilloma and invasive bronchopulmonary aspergillosis. The most common pathogen being A. fumigatus followed by A. flavus, A. niger and A. terreus. Early diagnosis and treatment are the mainstay to prevent disease progression.

Objectives-

- To evaluate the utility of Aspergillus specific galactomannan antigen detection for diagnosis of pulmonary aspergillosis.
- To isolate Aspergillus spp. from respiratory sample (Bronchoalveolar lavage) obtained from clinically suspected cases of pulmonary aspergillosis.
- To establish a correlation between microscopy, culture and serodiagnosis of pulmonary aspergillosis.
- To perform antifungal susceptibility test on Aspergillus isolates.

Methods-

This is a hospital based cross-sectional study conducted in the Department of Microbiology in collaboration with Department of Pulmonary Medicine, SCBMCH, Cuttack. BAL fluid was collected aseptically for serological and mycological processing. Aspergillus galactomannan Ag detection was done by GM-LFA. BAL fluid was subjected for microscopic examination in 10%KOH and cultured on SDA. Identification and

speciation was done by LPCB mount and slide culture. AFST was performed via microbroth dilution method to determine MIC. Routine tests like CBC, AEC were performed from blood.

Results-

In our study, pulmonary aspergillosis were predominantly seen in patients aged 40-60yrs(65.2%) with male preponderance(78%). A total of 50 BAL samples were processed, out of which 23(46%) were galactomannan positive. However, only 12(24%) and 7(14%) showed positive fungal growth and fungal smear respectively. A.fumigatus(41.6%) was the predominant isolate followed by A.niger(33.3%) and A.flavus(25%). All the isolates were susceptible to Amphotericin B, Voriconazole, Posaconazole & Micafungin but resistant to Fluconazole. 16.6% of the isolates showed resistant to Itraconazole.

Conclusion-

The present study demonstrated that Aspergillus specific galactomannan assay is a valuable diagnostic tool for early detection of invasive aspergillosis, and helps in initiating appropriate antifungal treatment, thereby reducing unnecessary broad spectrum antibiotic use and limiting the emergence of antimicrobial resistance.

OP 5:

Comparison of different methods for in vitro susceptibility testing of colistin in Gram negative bacilli among patients admitted in Hi-Tech Medical College and Hospital, Bhubaneswar.

Dr Nishikanta Sahoo

2nd Year ,HiTech Medical College and Hospital Bhubaneswar

Introduction:

Antimicrobial resistance (AMR) is a critical global health issue driven by antibiotic misuse and overuse in various sectors, leading to the emergence of resistant microorganisms.1 Paenibacilluspolymyxa is a spore forming soil organism from which a group of antimicrobial agent Polymyxins are formed to which Colistin belongs. There are five polymyxin molecules(A,B,C,D and E) out of which Polymyxins E and B are used clinically in humans. Colistin is generally used to treat infections with multidrug-resistant, extensively drug-resistant and pan drug resistant bacteria in humans .2 It is usually administered by injection or inhalation (the latter, for example, for patients with cystic fibrosis) as the sodium salt of colistin methanesulfonate, which is an inactive prodrug.3,4 Considering the increasing use and demand for colistin and limited methods for colistin minimum inhibitory concentration determination are available to clinical microbiology laboratories. Therefore, the relative insufficiency of knowledge regarding resistance, we evaluated different susceptibility testing methods for this class of antimicrobial within the present study. At present the study was designed and planned to systemically determine the various methods of sensitivity testing available for colistin.5

Objective

1. To study the bacteriological profile of all clinical samples collected from the admitted patients in Hi-Tech MCH, BBSR. 2.To compare the most accurate and robust method for the detection of colistin resistance among Gram-negative bacteria by comparing the performance of four methods (Phoenix compact system, Colistin broth disc elution, disk diffusion and broth microdilution method).

Methods

This one year prospective and observational study was conducted in the Department of Microbiology at Hi-Tech Medical College and Hospital, Bhubaneswar from June 2024 to May 2025. Samples received to the laboratory were identified and AST was done by Phoenix compact system, those isolates which are colistin resistant were then later compared with Colistin broth disc elution, disk diffusion and broth microdilution method.

Results

Out of the 620 samples, 456 isolates were Gram Negative Bacilli. Colistin resistance was found in 57 (12.5%) strains among the gram negative isolates by BMD method.Klebsiella pneumoniae had the highest (20.4%) colistin resistance among GNBs. By comparing with BMD method, the categorical agreement of Disc diffusion and Phoenix was 61 % and 30% respectively. The sensitivity of the CBDE method compared to gold standard BMD varied from 97.8–98.6% for different strains.

Discussion & Conclusion

Due to the high frequency of very major error, the use of Disk diffusion and Automated Phoenix compact system are not recommended by Clinical laboratory and standards institute (CLSI) for colistin susceptibility testing while CBDE is the recommended method which yields a significant categorical agreement with BMD method which can be used in routine laboratories for the detection of colistin resistance.

OP 6:

Synergistic combination of Ceftazidime/Avibactam with Aztreonam against Carbapenem-resistant Klebsiella pneumoniae in ICU patients.

Dr Nishikanta Muduli

2nd year, Kalinga Institute of Medical Sciences.

Introduction

The global rise of multidrug-resistant (MDR) bacteria has heightened concerns about infections that are untreatable with conventional antibiotics. Carbapenem-resistant Klebsiella pneumoniae (CRKP), in particular, poses a serious public health threat, increasing mortality rates among critically ill patients and exacerbating the financial burden of hospital stays worldwide. Ceftazidime/Avibactam (CAZ/AVI) inhibits serine carbapenemases such as Ambler class A, class C, and some class D beta-lactamases but ineffective

against class B beta-lactamases, including VIM, NDM, and other metallo-beta lactamases. Aztreonam (ATM) is stable to the hydrolysis of MBLs. So, the combination of Ceftazidime/avibactam plus Aztreonam is a valuable option to treat infections by beta-lactamase-producing Gram-negative pathogens producing serine ß-lactamases, MBLs or both.

Objective

This study aims to evaluate the in vitro activity of CAZ/AVI in combination with Aztreonam against MBL producing Klebsiella pneumoniae by "E-strip-disc diffusion" method.

Materials & methods

This is a cross-sectional descriptive study conducted in department of Microbiology in collaboration with ICU from 1st January 2024 to 31st December 2024, KIMS, Bhubaneswar. CRKP pathogens were isolated from various clinical samples. Modified carbapenem inactivation method (mCIM) and EDTA-modified carbapenem inactivation method (eCIM) phenotypic tests were performed to detect and differentiate between serine and metallo-based carbapenemases for Enterobacterales17 as per CLSI. Carbapenem resistant Klebsiella pneumoniae were tested for CAZ/AVI, ATM separately and synergy test was done between CAZ/AVI E-strip and ATM disk on MBL strains. The synergy was demonstrated by augmentation of ATM zone towards CZA strip.

Results

Out of total 58 number of CRE tested 76% (44/58) were CRKP. Most of the CRKP were isolated from the age group 61 to 80 years and males were more affected 75% (33/44) than females 25% (11/44). CRKP were mostly isolated from ET samples 32% (14/44) followed by urine 27% (12/44) and blood 14% (6/44). Among 44 isolates of CRKP 86% (38/44) isolates were resistant to both CAZ/AVI and ATM. Out of 38 CAZ/AVI resistant isolates 95% (36/38) were mCIM test positive. Out of 36 mCIM positive 81% (29/36) were eCIM positive indicating the production of MBL. Out of 29 MBL producers which were resistant to both CZA/AVI and ATM separately but when they were synergistically effective. So, synergy was positive in 97% (28/29) and 3% (1/29) was negative.

Conclusion

The novel combination of CAZ-AVI and ATM demonstrates significant in vitro efficacy against MBL producing Klebsiella pneumoniae strains. This combination effectively overcomes resistance mediated by MBLs and serine beta lactamases, offering a promising therapeutic option for treating highly resistant CRKP infections.

OP 7:

Susceptibility pattern of Carbepenem resistant non-fermenters in ICU set up of a tertiary care hospital

Dr Soumya Shubhadarshini Samal
2nd year, IMS & SUM Hospital, Bhubaneswar

Introduction

Carbapenem-resistant nonfermenting gram-negative bacilli (CR-NFGNB), particularly Pseudomonas aeruginosa and Acinetobacter baumannii, have emerged as significant nosocomial pathogens, especially in intensive care units. These organisms are associated with high morbidity and mortality due to limited treatment options and their ability to survive in harsh hospital environments.

Objective

To determine the antimicrobial susceptibility pattern of carbapenem-resistant nonfermenters isolated from ICU patients in a tertiary care hospital and to assess their resistance profiles to guide appropriate empirical therapy.

Method

This study was conducted over a period of 12 months in the ICU of a tertiary care teaching hospital. Clinical specimens such as ET aspirates, urine, blood, tracheal aspirates and wound swabs were collected from ICU patients. Nonfermenting gram-negative bacilli were isolated using standard microbiological techniques and identified by VITEK-2. Antimicrobial susceptibility testing was performed using VITEK-2 & Kirby-Bauer disc diffusion method. Interpretation was done as per CLSI guideline 2024. Isolates resistant to imipenem and/or meropenem were included in the study.

Result:

A total of 200 nonfermenting gram-negative bacilli were isolated from various ICU specimens. Among these, 124 (62%) were carbapenem-resistant, comprising predominantly Acinetobacter baumannii (65%), followed by Pseudomonas aeruginosa (30%), other nonfermenters(5%) like Elizabethkingiameningosepticum(2.5%), Stenotrophomonas maltophilia(1.5%), Burkholderiacepaciacplx(1%). The highest number of isolates were from ET aspirates (40%), followed by blood (20%), tracheal aspirates (15%), wound swabs (15%) and urine (10%). Cefiderocol showed the highest sensitivity (99%) among all isolates,followed by Ceftazidime-avibactam and Aztreonam (85% & 55% respectively) for CRPA.For CRAB Minocycline and Gentamycin showed 35%,25% sensitivity respectively.Tetracycline showed high sensitivity to E.meningosepticum followed by Levofloxacin and for S.Maltophilia ,Burkholderiacepaciacplx ;Levofloxacin and Minocycline showed highest sensitivity respectively.Multidrug resistance (MDR) was observed in 80% of the Acinetobacter isolates and 72% of Pseudomonas isolates.

Conclusion:

The study reveals high prevalence of carbapenem- resistant nonfermenters in the ICU with Acinetobacter baumannii as the predominant isolate.Colistin remains the most effective agent, but its potential toxicity and the threat of emerging resistance necessitate cautious use. Regular surveillance and strict antibiotic stewardship are essential to control the spread of these pathogens.

OP 8:
Prevalence of Chlamydial cervicitis in women of reproductive age group with vaginal discharge- a hospital based study

Dr. Mohammed Abdul Mazid
2nd yr PG, S.C.B.M.C.H

Introduction:

Reproductive tract infections are a global health problem. Chlamydia trachomatis is currently recognized as the major cause of sexually transmitted infections in women of reproductive age group. Chlamydia trachomatis infection can result in scarring of fallopian tubes, ovaries, endometrial lining with increased risk of ectopic pregnancy and tubal infertility. Notably, infants born to the infected mother may have purulent conjunctivitis, bronchitis and pneumonia.

Aim and Objectives:

1. To determine the prevalence of Chlamydial cervicitis among patients, presenting with vaginal discharge.
2. To find out the clinical outcome of Chlamydial cervicitis infection.

Methods and Methodology:

Study Design: Hospital based prospective study Place of Study: Department of Microbiology and department of Obstetrics &Gynecology of a tertiary care hospital. Study Population: • Inclusion Criteria: All patients presenting at department of Obstetrics & Gynaecology with complains of vaginal discharge. • Exclusion Criteria: 1) Patient not given her consent for examination. 2) Not in reproductive age group. 3) If the patient has received antibiotics or vaginal pessaries within preceding 2 weeks. Method: Samples like vaginal discharge & serum were collected from 150 female patients with vaginal discharge attending Obstetrics &Gynecology OPD and are selected as test sample. Samples were also collected from 50 women of same age group attending the O&G OPD with complaints other than vaginal discharge were selected as control. The samples were screened by rapid immunoassay test for detection of Chlamydia trachomatis antigen and IgG antibody for Chlamydia trachomatis by ELISA.

Result:

Out of the 150 samples, 12(8%) were tested positive for Chlamydia trachomatis antigen by rapid immunoassay test and IgG ELISA. Amongst the 50 control samples all were found to be negative. Among total positive patients most were from the age group of 15-25 years-9(75%). All were of low and medium socioeconomic status 6 each (50%) in each group. 9(75%) belong to rural area and 9 (75%) were married females.

Conclusion:

Our study had shown that significant proportion of our population harbor Chlamydia trachomatis. So, it becomes imperative that health and screening programs be employed to prevent spread of this infection and its long-term sequelae in women of childbearing age.

OP 9:
Microbiological Perspective of Fungal Rhinosinusitis: A Cross-Sectional Study

Dr Sarada Priyadarshini
2nd Year, KIMS

Introduction:

Fungal rhinosinusitis (FRS) encompasses a broad spectrum of sinonasal infections ranging from non-invasive to life-threatening invasive diseases. The diagnostic challenge is especially prominent in tropical countries like India, where factors such as Diabetes, steroid use & post COVID-19 immunosuppression have led to a surge in cases. Rapid & reliable microbiological diagnosis is key for early intervention.

Objectives:

Identification of fungal etiological agents in clinically diagnosed rhinosinusitis (FRS) cases and find out the risk factors associated with it.

Materials & Methods:

This was a cross-sectional study conducted in the Department of Microbiology & Otolaryngology from February 2024-May 2025 at KIMS. Total 62 patients were included in the study. Nasal swabs and tissue specimens were collected from participants and processed for fungal identification by 10% KOH and culture on SDA agar with or without antibiotics. Identification was based on colony morphology & LPCB mount. Demographic details, clinical findings and other details were entered in excel sheet and analyzed using the Chi- square test.

Results:

Out of 62 FRS patients, KOH positivity was 40.3%, culture positivity 35.4% & both KOH and culture positivity was seen in only 30.6% cases. Aspergillus flavus 07(30%), Aspergillus fumigatus 06 (26%), Aspergillus niger 07(30%) and Rhizopus 03(13%) were the commonest isolates. Among the culture positive patients 31.8% had history of addiction ,34.7% had pets in their house & association of T2DM, HTN were observed in 22.2% & 27% respectively. Statistically significant association was found between fungal etiology and clinical symptoms like nasal pain, nasal obstruction (p= 0.0001), dental pain (p = 0.0015), headache (p= 0.0168) and nasal polyp (p= 0.0004).

Conclusion:

- KOH and culture should be routinely employed as frontline diagnostic tools for diagnosis of FRS in resource-limited settings.
- This study reinforces the microbiological importance of early phenotypic screening to guide antifungal therapy & improve clinical outcomes.

OP 10:

A study on the microbiological profile of upper respiratory tract infection with special reference to viruses in paediatric age group in a tertiary care hospitalof eastern Odisha

Dr Manaswini Patro, Dr Pritilata Panda, Dr Soumya Sibani Sahoo, DrPravakar Mishra
SCB Medical College & Hospital.

Introduction:

Upper respiratory tract infections (URTIs) remain one of the most frequent illnesses in childhood, particularly in those under five years of age. The combination of waning maternal antibodies and immature immune defences contributes to this vulnerability. While antibiotics are often prescribed, viral pathogens are significant contributors and frequently underdiagnosed. Identifying microbial patterns and resistance profiles is essential for targeted interventions and combating antimicrobial resistance (AMR).

Objectives:

- To identify common bacterial pathogens in pediatric URTIs (0–14 years).
- To evaluate antimicrobial resistance among isolates.
- To detect viral aetiologies using molecular diagnostics.
- To analyse the prevalence of pathogens based by standard statistical methods.

Materials and Methods:

This observational study was conducted over six months (Oct 2024–Apr 2025) in SVPGIP and SCBMCH, Cuttack. A total of 92 paediatric patients were enrolled.2sets of nasopharyngeal and throat swabs were collected aseptically, one swab was processed for bacterial identification using culture methods (blood and chocolate agar) and biochemical tests. While, the second swab was collected in VTM and stored at -20? fridge and further multiplex PCR was done for viral detection. Statistical tools were applied for prevalence analysis.

Results:

- Highest infection rates were seen in the 0–3-year age group.
- Males (56.52%) were more frequently affected than females (48.91%).
- Predominant bacterial isolates: Staphylococcus aureus (29.34%), Streptococcus pyogenes (19.56%), Klebsiella pneumoniae. (17.39%)
- Viral pathogens: Adenovirus (66.66%), Influenza virus (60%), Rhinovirus (40%).

Conclusion:

This study reinforces the need for microbial profiling in paediatric URTIs. Viral identification can reduce unnecessary antibiotic use and address rising AMR rates. Broader use of molecular diagnostics could enhance paediatric infection management and stewardship practices.

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OP 11:

A study on Serum Biomarkers and Bloodstream Infections

Shubham Swagat Jena

2nd year PG Student, MKCGMCH

Introduction:

Bloodstream infections (BSIs) are clinically significant due to their high morbidity and mortality. Traditional tools like clinical manifestations and blood cultures are limited by low sensitivity and delayed results. Serum biomarkers provide advantages in predicting infection severity, guiding therapy, and supporting microbiological findings.

Objectives:

This study aims to evaluate the role of serum biomarkers in predicting BSIs, monitor biomarker trends before and after antibiotic therapy, and correlate them with culture results and clinical response.

Material and Methods:

This prospective observational study was conducted at MKCG Medical College and Hospital from January to June 2025. Patients clinically suspected of BSIs were included, regardless of age or gender. Blood samples for cultures and biomarker testing like C-Reactive Protein (CRP), Procalcitonin (PCT), WBC count were collected prior to and 48 hours after starting antibiotics. Treatment response was assessed through clinical improvement and biomarker trends.

Results:

Total of 180 Patients (mean age was 34.5 years; 108 males and 72 females) were included in this study, with the highest cases from Medicine ICU (30%) followed by from Neonatal ICU (25%). Most common isolated organism from positive culture was Escherichia coli (31%) followed by Klebsiella pneumoniae (27%).Higher mortality rate (5%) was observed in patients with increased biomarker levels.

Conclusion:

CRP, PCT, and WBC count trends correlate with bloodstream infection status and therapeutic response. PCT, in particular, demonstrated distinct initial elevation and decline in confirmed BSI cases, emphasizing its value as both a diagnostic aid and a treatment response marker.

OP 12:

HCV antibody detection by ELISA in the diagnosis of Hepatitis C virus infection in a tertiary care hospital

Dr Siaryong Kalpana Aimol
2nd Year PG, VIMSAR

Introduction:

Hepatitis C virus infections poses a public health challenge in India and has a substantial effect on morbidity and mortality worldwide. Early diagnosis and effective treatment of HCV can mitigate liver-related deaths and prevent further transmission. ELISA is considered as reliable diagnostic approaches.

Objective:

This study aimed to evaluate the antibody test for the diagnosis of HCV and the seroprevalence of HCV infection in various demographic profile.

Materials:

A hospital based cross-sectional study was done from May 2024–May2025 in serology section of microbiology department. This study included 305 serum samples of all patients for HCV screening.

Methods:

The samples were tested using Merilisa HCV. The assay uses specific recombinant protein- Core, NS3, NS4, NS5 for determination of Anti-HCV antibodies. Based on sandwich principle; results are determined automatically by the EIAQuant

Results:

HCV seroprevalence of 12.13%(37/305) with ELISA cut off value- 0.333 was observed in the present study. The study prevalence of anti-HCV among males (72.9%) were higher than females (27%). Maximum positive cases were in the age group of 21-30 years (22/37, 59.4%). A significant statistical association of HCV infection with Alcoholic liver disease observed in the present study.

Conclusion:

Lack of an effective vaccine and the increased risk of serious complications have made prevention and early detection of HCV extremely important. Scaling up the screening for early diagnosis can improve clinical outcome in the patients, as appropriate therapy and management can be initiated at the earliest, thus, decreasing mortality and morbidity seen in Hepatitis C infection.

OP 13:
Association of follow -up blood culture with clinical outcome in patients ofstream infection in atertiary care hospital

Dr Prajna Nayak, Dr Dharitri Mohapatra, Dr Somi Patro, Dr Rakesh Chandra Behera
SCB MCH.

Introduction:

In the management of patients with blood stream infection (BSI), performing follow-up blood culture (FUBC) is recommended. FUBC affects the therapeutic management of BSI and patient outcome. Appropriate clinical and antimicrobial management of BSI are crucial to improve patient survival.

Aim of the study:

- To study the performance of FUBC in patients with gram positive and gram-negative BSI.
- To analyses the impact of FUBC on therapeutic management and patient outcome.

Material and methods:

Blood samples were collected from clinically suspected blood stream infection cases. Blood culture was performed by automated system. All positively flagged bottles were considered as index blood culture. Identification and AST were also done by using automated system. Follow-up blood culture was done every 72hrs, till culture was negative or patient showed clinical improvement.

Results:

Out of 262 blood samples 72(27.5%) were culture positive and considered as index blood culture. Follow-up blood culture was done and positive in 21(29.2%) cases. Persistent BSI, positive BSI and negative BSI were seen in 9(42.8%), 8(38.09%), 3(14.28%) respectively. The most common isolate in persistent BSI was Acinetobacter baumanii 5 (23.8%) followed by Klebsiella pneumoniae 4(19.04%). AST profile similar to index blood culture was seen in 2(9.5%) whereas different AST profile was seen in 7(33.3%) cases. De-escalation & escalation was done in 11(52.3%) & 10(47.6%) cases respectively during follow-up. Due to FUBC, source like foleys catheter, central line catheter and endotracheal tube could be detected in 8(88.9%) of persistent BSI and removed.

Conclusion:

FUBC helps in early detection and treatment which resulted in reduction of overall morbidity and mortality. De-escalation & escalation could be advised which in turn helped in reduction of antimicrobial resistance. Detection and removal of source added in speedy recovery.

OP 14:
Antibiotic profile of K. pneumoniae isolates from endotracheal aspirates in a tertiary care hospital.

Authors:Dr. Sonia Pradhan[1], Dr. Ansuman Dash[2], Dr. Madhushree Mishra[3]

[1]PG Resident, Department of Microbiology, Hi-Tech Medical College and Hospital, Rourkela.
[2]Associate Professor, Department of Microbiology, Hi-Tech Medical College and Hospital, Rourkela.
[3]Senior Resident, Department of Dentistry, Hi-Tech Medical College and Hospital, Rourkela.

Introduction:

Klebsiella pneumoniae, a Gram-negative pathogen, commonly causes ICU-acquired infections like pneumonia and sepsis. With rising multi-drug resistance, treatment options are narrow. Endotracheal aspirate cultures aid in identifying resistance profiles, which are essential for guiding therapy, antimicrobial stewardship and for better infection control. Continuous monitoring is crucial due to the increasing prevalence of resistant strains.

Objectives:

To describe the antibiotic resistance patterns of Klebsiella pneumoniae isolates from endotracheal aspirates in ICU patients, at Hi-Tech Medical College & Hospital, Rourkela.

Methodology:

A descriptive cross-sectional study was conducted in the Microbiology Department of Hi-Tech Medical College & Hospital, Rourkela, from July 2024-January 2025 with 196 endotracheal aspirate samples from ICU patients suspected of ventilator-associated pneumonia. Standard microbiological methods and automated systems (BD Phoenix™ M50) were used for identification and antibiotic susceptibility testing as per CLSI guidelines.

Results:

Total 196 endotracheal aspirate samples, 132 were culture-positive: 62 (46.96%) Klebsiella pneumoniae, 41 (31.06%) Acinetobacter baumannii, and 29 (21.96%) other organisms. Most patients were male (58.06%), with mean age of 55, and ICU stays exceeding 10 days. Carbapenem-resistant K. pneumoniae showed more sensitivity towards Amikacin (19.3%) and Gentamicin (16.39%) compared to low sensitivity towards the antibiotics such as Imipenem (3.2%), Meropenem (8.1%), Ciprofloxacin (3.9%).

Conclusion:

This study demonstrates the concerning trend of K. pneumoniae detected in endotracheal aspirates from intensive care unit patients becoming increasingly resistant to medications. Among the actions that may be taken include the rational use of antibiotics, effective infection management, and continuous resistance monitoring.

OP 15:
Clinico-etiological study of urethritis among patients in a tertiary care hospital.

Dr. Tushar Ranjan Panda[1], Prof. Dr. Sanghamitra Padhi[2], Dr. Satyadarshi Pattnaik[3]

1.Junior Resident, Department of Microbiology, MKCG Medical College& Hospital, Berhampur, Odisha,
2. Professor & Head of Department, Department of Microbiology, MKCG Medical College &Hospital, Berhampur, Odisha,
3.Professor &Head of Department, Department of Dermatology/Venereology, MKCG Medical College &Hospital, Berhampur, Odisha.

Introduction:

Urethritis, characterized by inflammation of the urethra, is a common presentation in sexually transmitted infections (STIs). It may be caused by a variety of infectious agents, both gonococcal and non-gonococcal. Understanding the clinical presentations and etiological agents involved is essential for effective diagnosis and treatment.

Objectives:

To evaluate the clinical features and identify the etiological agents responsible for urethritis among patients attending a tertiary care hospital.

Methods:

A prospective observational study was conducted over a period of 24 months in the Department of Microbiology and Dermatology/Venereology and Obstetrics - Gynecology at a tertiary care hospital. Patients presenting with symptoms suggestive of urethritis, such as dysuria, urethral discharge, and itching, were enrolled. Clinical data were recorded, and urethral swabs and urine samples were collected. Microbiological analysis included Gram staining, culture techniques (blood agar for aerobic and anaerobic, chocolate agar, PPLO agar, SDA plate, Modified Thayer martin medium) and nucleic acid amplification tests (NAATs) for identification of pathogens like *Neisseria gonorrhoeae*, *Mycoplasma genitalium, Ureaplasma urealyticum*, *chlamydia trachomatis* and others.

Results:

Out of total patients studied, the majority were males and females aged between 20–60 years. Gonococcal urethritis accounted for [10 %], while non-gonococcal urethritis (NGU) represented [7 %]. Among NGU, *Mycoplasma genitalium* ,*Ureaplasma urealyticum& Candida* were found. Co-infections were observed in a subset of patients. The predominant clinical symptom was purulent urethral discharge, followed by dysuria. Antimicrobial resistance, particularly in *N. gonorrhoeae*, was noted in a significant number of cases.

Conclusion:

The study highlights the predominance of non-gonococcal agents in urethritis and the importance of etiological diagnosis using molecular techniques. Regular surveillance, early diagnosis, and targeted therapy are critical for effective management and control of STIs, particularly in the backdrop of rising antimicrobial resistance.

OP 16:
A study on Hospital Acquired Infections in Central Intensive Care Unit of a tertiary care hospital, Western-Odisha

Dr Sidhanta Kumar Behera
2nd Year PG

Introduction

Hospital acquired infections (HAIs) are infections not present at admission but acquired 48 hrs after hospitalization. This is a significant cause of morbidity, mortality and increased healthcare costs in Intensive Care Units (ICUs). The burden is particularly high in developing countries due to limited resources and infection control challenges.

Objective

The study aimed to assess the incidence, types, microbiological profile and antimicrobial resistance patterns of HAIs in the CICU of VIMSAR, Burla.

Materials & Methods

It is a prospective study conducted in VIMSAR, BURLA from July 2024 to June 2025. Patients who developed infections after 48 hrs of hospital admission were included. From CICU all clinical samples were collected aseptically and sent to Department of Microbiology, VIMSAR, Burla. HAIs were classified based on CDC definitions.

Result

Out of 145 suspected HAI samples, 62 (43%) samples were found positive, 40 (66%) were Male, Majority case belongs to age group above 50, VAP cases 44 (72%) was most common HAIs and predominantly infection caused by Streptococcus pneumoniae.

Conclusion

HAIs remain a major challenge in ICUs, with high rate of drug resistance and prolonged hospital stays. Strict adherence to infection prevention protocols, routine surveillance and effective antimicrobial stewardship programs are crucial in reducing the burden of HAIs in ICUs. Ongoing staff training and policy implementation are needed.

OP 17:
Incidence, risk factor, microbiological profile and Antibiotic Susceptibility pattern of Ventilator-associated pneumonia in a Tertiary care Hospital, Odisha

Dr Deba Prasad Mishra
2nd year PG, Hitech MCH, Bhubaneswar

Introduction:

Ventilator associated pneumonia (VAP) is a nosocomial infection that develops after 48 hours of mechanical ventilation (MV) with an incidence rate ranging from 13 to 51 per 1000 ventilator days.

Objectives:

1) To study the incidence and risk factors for VAP at Hi-tech Medical College, Bhubaneswar.
2) To isolate and identify the bacteria responsible for VAP.
3) To determine the antibiotic susceptibility pattern of isolated pathogen.

Materials and Methods:

This cross-sectional study was conducted in the intensive care unit (ICU) of Hi- tech Medical College from January 2025 to June 2025 for a period of six months. After taking consent from patient's relatives, detailed history with physical examination including risk factors were taken. Patients aged above 10 years admitted in ICU on mechanical ventilation for more than 48 hours, clinically suspected of having VAP was included. Patients who were ventilated less than 48 hours and patients who were diagnosed to have pneumonia before mechanical ventilation were excluded. Samples of Endotracheal aspirate (ETA), tracheal secretions or ET tips were collected aseptically and processed for gram staining, culture on blood agar and MacConkey agar. Further identifications were done by standard biochemical test and antibiotic sensitivity test was performed by disk diffusion method on Mueller Hinton agar. VAP cases were assessed based on clinical pulmonary infection score (CPIS) system

Result:

Out of total 61 samples, 38 samples was culture positive,9 of which were VAP cases positive. In this study the VAP rate was 14.7 per 1000 ventilator days and the most common risk factor associated was impaired consciousness (66.6%). Most of the VAP patients were affected in the age group of > 60 yrs (55.5%). The common organisms responsible for VAP were Acinetobacter baumannii (36.8%) followed by Klebsiella pneumoniae (23.6%).

Conclusion:

This study provided essential data on the incidence of VAP rate, microbiological etiology and antibiotic resistance pattern of VAP, which will help the clinicians for appropriate antibiotic selection. it will also help in patient management and potentially reduce morbidity and mortality associated with VAP.

OP 18:
Incidence, Duration of Stay, and Clinical Outcomes of MDR Infections in ICU Patients: A Prospective Observational Study

Dr Bijayalaxmi Patra
2nd Year PG, Hitech MCH, Bhubaneswar

Introduction:

The burden of multidrug-resistant (MDR) organisms in ICUs continues to rise globally, posing serious therapeutic and prognostic challenges. Patients admitted to ICUs are vulnerable to infections due to compromised immunity, prolonged mechanical ventilation and frequent exposure to invasive procedures. Common pathogens like Klebsiella, Acinetobacter and Pseudomonas have developed resistance mechanisms against multiple antimicrobial agents, making empirical therapy increasingly difficult. MDR infections are associated with increased mortality, longer ICU stays and higher healthcare costs.

Objectives:

1. To determine the incidence rate of multidrug-resistant (MDR) infections among ICU patients.
2. To assess the average duration of ICU stay in patients with MDR infections.
3. To evaluate the clinical outcomes (recovery, morbidity, mortality) of ICU patients with MDR infections.
4. To identify the most common MDR organisms isolated from ICU patients.

Materials and Methods:

A prospective observational study was conducted at Hi tech medical college and hospitals from december 2024 to june 2025 on 182 ICU patients with culture-confirmed MDR infection. Patient data including pathogen identification, length of ICU stay, and clinical outcomes were analyzed Inclusion Criteria: 1. Patients aged =18 years admitted to the ICU with culture-proven bacterial infections during ICU stay who have been hospitalized for more than 48 hours. 2.Patients infected with organisms classified as MDR based on CDC or CLSI definitions. Exclusion Criteria: 1. Patients discharged or expired within 48 hours of ICU admission. 2.Readmissions of the same patient during the study period (only first ICU admission considered).

Results:

This study highlights the incidence of MDR infections in ICU by culture sites are Endotracheal/BAL (35.7%) followed by Blood culture (26.4%), and Urine culture (14.8%). The frequency of different MDR organisms identified among ICU patients are Klebsiella Pneumoniae (31.8%) was the commonest followed by Acinetobacter baumannii (31.3%), Pseudomonas species (18.6%). The average ICU stay among infected patients was approximately 14.5 days, with longer durations observed in patients who eventually succumbed to the illness.

Conclusion:

The findings emphasize the high burden of MDR infections in ICUs, particularly due to Klebsiella and Acinetobacter. These infections are associated with significant morbidity and mortality, necessitating urgent action in the form of improved infection control and rational antibiotic use.

OP 19:

A study on microbiological profile & ASTof diabetic foot infection with special reference to drugs resistance strain in atertiary care hospital

Dr Jyotsna Padhan

2nd Year PG, HiTech Medical College and Hospital Bhubaneswar

Introduction:

Diabetic foot ulcer is a serious & common complication of diabetic mellitus that significantly increase that cost of treatment {1} The most common cause of morbidity & mortality in DFU is infection ,which are seen in 40%-80% of the cases{6} Diabetic neuropathy & micro-or macro-ischemic are that two main risk factors that cause DFU{7} Impaired microvascular circulation limits the access of phagocytic cells to infected area & this results in poor concentration of antibiotics in infected tissue{8} Hence, diabetic foot wounds are commonly infected & infection lead to formation of microthrombi causing further ischemia ,necrosis & progressive gangrene.

Objectives:

To evaluate the bacteriological profile of patients with diabetic foot ulcers & their antibiotic susceptibility pattern.

Materials & methods:

Study period- May 24th 2024 to May 25th 2025 Study area - Hi-tech Medical College, Bhubaneswar. Study participants- 159 patients having Diabetic Foot Ulcer and Diabetes, from Department of Surgery. Data collection method- Details of the organisms isolated & susceptibility pattern were collected from microbiology department

Results:

Out of total cases of 159, male is at 90 (56.6%) & rest females. Total 86 (54.08%) samples were found positive for the isolate where negative isolate - 64(74.4%) & rest gram-positive isolate. Gram-negative organisms were more predominant than the gram-positive organisms. Gram-negative organisms had good susceptibility ranging from 75% to 100% to Meropenum, Carbapenum& Piperacillin-Tazobactum& gram-positive organisms had good susceptibility to Vancomycin.

Conclusion:

The study showed predominantly gram-negative isolate as the cause of diabetic foot ulcers. Proper use of drug, based on antibiotic pattern will help reduce the risk of diabetic foot ulcers.

OP 20:

From Vein to VITEK: A Comparative Study of Direct versus Conventional Culture- Based VITEK Identification and Susceptibility Testing with Turnaround Time Analysis

Dr. Nagendhira Raju. M[1], Dr. Sonali Padhy[1], Dr. Ashoka Mahapatra[1]

[1]Department of Microbiology, AIIMS Bhubaneswar

Introduction:

Bloodstream infections (BSIs) are a major cause of morbidity and mortality, particularly in healthcare settings. Prompt identification (ID) and antimicrobial susceptibility testing (AST) are essential for initiating effective therapy. However, conventional workflows using automated systems like VITEK® 2 typically require 48–72 hours after a blood culture flags positive, delaying targeted treatment. Several rapid diagnostic methods—such as direct MALDI-TOF MS, Accelerate Pheno™, and multiplex PCR—have been developed to reduce turnaround time (TAT), but these are often limited by high cost, narrow organism panels, lack of direct phenotypic AST, variable performance in complex specimens, and the need for specialized infrastructure. Given these limitations, direct ID and AST using existing systems like VITEK® 2 offers a cost-effective and practical solution, particularly for monomicrobial Gram-negative infections. This study aimed to evaluate the performance of direct VITEK® 2 testing from positive blood culture bottles, in comparison to the conventional method, focusing on ID/AST accuracy and TAT.

Materials and Methods:

Forty blood cultures positive for Gram-negative bacilli in BD BACTEC™ Plus Aerobic bottles were processed using both direct and conventional methods. Gram-positive and polymicrobial cultures were excluded. AST results were evaluated for categorical agreement (CA), essential agreement (EA), minor error (mE), major error (ME), and very major error (VME) as per CLSI M52 guidelines. TAT from positivity to final reporting was recorded.

Results:

The direct method showed no misidentifications, with one unidentified isolate. CA and EA were 92.55% and 91.06%, respectively, with mE at 1.9%, ME at 1.06%, and VME at 4.5%. The mean TAT was reduced by 18–24 hours ($p<0.05$), with most discrepancies seen in ß-lactam/ß-lactamase inhibitors and aminoglycosides.

Conclusion:

Direct ID/AST using VITEK® 2 offers a reliable, faster alternative to conventional methods, reducing TAT significantly without compromising accuracy, thus supporting rapid clinical decision-making and antimicrobial stewardship.

OP 21:

Evaluating the Effectiveness of Fosfomycin in Treating Escherichia coli Infections: A Focus on Urinary Tract Infections

Authors (Presenting author underlined):

Dr Swayam Swastik Sahoo, Dr Sunita Kabi, Dr Kundan Kumar Sahu

Affiliations: Department of Microbiology, IMS & SUM Hospital, Bhubaneswar Name & Designation of Presenting Author: Dr Swayam Swastik Sahoo, 2nd year PG Resident, Department of Microbiology, IMS & Sum Hospital, Bhubaneswar

Abstract:

INTRODUCTION:

Escherichia coli (E. coli) is a predominant causative agent of urinary tract infections (UTIs), with increasing antimicrobial resistance posing significant therapeutic challenges. Fosfomycin and Nitrofurantoin are broad-spectrum oral antibiotics with high urine concentration and bactericidal activity against a wide range of bacteria.

Objectives:

This study aimed to assess the susceptibility pattern of E. coli isolates to fosfomycin and nitrofurantoin in patients with confirmed infections, thereby evaluating their continued clinical utility.

Methods:

Clinical specimens such as urine, pus, ascitic fluid, BAL fluid, blood, bile were collected from the samples received in central lab, IMS and SUM Hospital over a period of 6 months. E. coli were isolated using the standard microbiological culture and identified by VITEK-2. Antimicrobial susceptibility testing was performed by Kirby- Bauer disc diffusion method and interpreted as per CLSI guideline 2025.

Results:

A total of 461 E. coli bacilli were isolated from various clinical specimens. Among these, 233 (50.5%) isolates belonged to male patients and 228 (49.5%) belonged to female patients. The majority of E. coli isolates demonstrated high susceptibility towards Fosfomycin (n= 461, {92.4 %}), with decreasing pattern seen in Nitrofurantoin (n= 231, {58.33 %}). The resistance pattern of Fosfomycin in urine sample is 3.89%, pus sample - 7.92%, blood-6.67%, bile-7.14%.

Conclusion:

This study reveals a high resistance rate of a reserve drug Fosfomycin seen in pus samples followed by urine sample. Regular surveillance of susceptibility patterns is essential to guide empirical therapy and preserve the efficacy of these agents.

OP 22:
Clinicomycological Study of Superficial Mycoses among the patients attending a Tertiary Care Hospital in Eastern Odisha

Dr. Vijayalaxmi Hansdah
2nd year PG

Abstract:

Introduction:

Superficial mycoses are fungal infections affecting the hair, nails, and skin. They are more prevalent in tropical and subtropical regions like India due to favourable climatic conditions and socioeconomic factors such as overcrowding, poor hygiene, and occupations involving frequent exposure to moisture.

Objective:

This study aimed to evaluate the clinicomycological profile of superficial mycoses in patients attending a tertiary care hospital in eastern Odisha.

Materials & Methods:

A study was conducted over 12 months (Aug 2024–Jan 2025) in the Departments of Microbiology and Dermatology, S.C.B. Medical College & Hospital, Cuttack. A total of 412 clinically suspected cases were included. Samples such as skin scrapings, hair, and nail clippings were collected, processed using 10–20% KOH mounts, and cultured on Sabouraud Dextrose Agar with and without antibiotics. Positive isolates were subcultured on Potato Dextrose Agar and identified using Lactophenol Cotton Blue (LPCB) mounts and biochemical tests including urease, sugar assimilation, and hair perforation tests.

Results:

This study suggested that the most affected age group was 21–30 years (32.5%) with a male predominance (61%). The most common clinical presentation was *Tinea corporis* (28.6%), followed by *Tinea cruris* (21.8%), *Pityriasis versicolor* (16.7%), *Tinea pedis* (12.4%), *Onychomycosis* (11.1%), and *Tinea capitis* (9.4%). Dermatophytes were the predominant isolates (67%), followed by non-dermatophyticmolds (20%) and yeasts (13%). *Trichophyton rubrum* was the most frequently isolated dermatophyte (42%), followed by *Trichophyton mentagrophytes* (25%). Among non-dermatophytes, *Aspergillus* (9%), *Fusarium* (6%), and *Curvularia* (5%) were commonly found. *Candida albicans* (9%) and *Trichosporon spp.* (4%) were the most frequent yeasts.

OP 23:
Subcutaneous Phaeohyphomycosis by Medicopsisromeroi in a Diabetic Patient from a Long-standing Traumatic Lesion: An Unusual Emerging Fungal Threat

Dr. Pratikshya Mahapatra [1], Dr. Lipika Jena, Dr. Punyatoya Kar, Dr. Roshni Dandapat, Dr. Abhipsa Mohapatra, Dr. Rajshree Panigrahy, Dr. Kundan Kumar Sahoo

[1]Assistant Professor, Department of Microbiology, IMS & SUM Hospital, Bhubaneswar

Department of Microbiology, IMS & SUM Hospital, Bhubaneswar.

Introduction:

Medicopsisromeroi is an unusual emerging cause of subcutaneous phaeohyphomycosis primarily affecting individuals with impaired immune systems, particularly those with poorly controlled diabetes mellitus.

Objective:

This case highlights an unusual and neglected Medicopsisromeroi infection identified by microbiological investigation in a diabetic male presenting with an index finger lesion.

Materials and methods:

A 56-year-old male with a twenty-year history of diabetes presented with an insidious onset of swelling on his left index finger developing over six months. The patient had a history of trauma to the affected finger from metal flakes seven years prior while working in Dubai. Clinical examination revealed a 1.5 × 1.5 cm firm, cystic, mobile, and non-tender swelling on the ventral aspect of his left index finger. The patient underwent an incision and drainage of swelling and purulent material, admixed with blood, which was given for cytological evaluation, as well as microbiological investigations.

Results:

The haematological parameters reported increased PPBS and HbA1c (6.8%). Bacterial culture revealed no growth, but KOH mount showed dark coloured septate filamentous fungal hyphae. On the 6th day of fungal culture, a growth of floccus, silvery grey mold with olive-black reverse was seen. Further LPCB (Lactophenol cotton blue) mount and slide culture showed the presence of non-sporulating septate, branched, and dark brown hyphae with the presence of pycnidia, which led to the characteristic identification of Medicopsisromeroi. Cytological analysis revealed the presence of abundant fungal hyphae with necrotic and suppurative inflammation, thereby corroborating the microbiological results.

Conclusions:

This case highlights the importance of considering neglected phaeohyphomycosis in diabetic patients with a long-standing history of occupational trauma. It also emphasises the need for microbiological investigations despite being notably complex to identify the rare dematiaceous fungi such as Medicopsisromeroi, which can contribute to subcutaneous phaeohyphomycosis in persons with impaired immunity.

Keywords: Medicopsisromeroi, Phaeohyphomycosis, Subcutaneous mycosis, Diabetes mellitus, Occupational exposure.

OP 24:
Hansen's Disease Revisited: Chronic Lepromatous Leprosy presenting with Erythema Nodosum Leprosum necroticans and Lucio Phenomenon

Roshni Dandapat
Assistant Professor, IMS & SUM Hospital

Introduction:

Lucio leprosy, although primitive, is a rare reactional state seen in cases of the diffuse form of lepromatous leprosy (LL). Albeit our state has successfully implemented the elimination program in 2015, the unavailability of reliable susceptibility testing is posing a hindrance to the prompt management and prevention of transmission of new and rare cases such as lucio leprosy.

Objective:

An unusual case of inadequately treated chronic lepromatous leprosy showing Erythema Nodosum Leprosum necroticans (ENLN) and lucio reaction along with superadded bacterial infection, emphasizing the significant risk of relapse and ongoing transmission.

Material methods:

A 51 years male patient, resident of Khorda, presented with complains of fever, loss of sensation of extremities and diffuse infiltrations throughout the body. Patient had a history of LL and was treated for 6 months, around 3 years back. Few other family members also presented with similar symptoms. Facial examination revealed eyebrow loss, saddle nose deformity, facial sagging and infiltration of the ears with necrotic ulcers. Bilateral symmetrical multiple hypopigmented macules with loss of appendage and necrosis were observed across trunk. Both legs exhibited non-pitting edema with traumatic ulceration and cellulitis. Complete bilateral glove-and-stocking anesthesia along with orchitis was seen.

Result:

Staphylococcus aureus was isolated from the lesion. Histopathological findings from the buttocks and back revealed ENLN and LL, respectively. ZN stain indicated live solid bacilli (BI: 5). Grade 1 thickening and sensory motor axonal demyelinating polyneuropathy of ulnar nerves was reported in nerve conduction study in both the extremities. Mycobacteria leprae was confirmed by the Truenat assay from the slit skin biopsy.

Conclusion:

High load of leprae bacilli was observed despite prior treatment of LL, indicating a significant risk of relapse and continued transmission. Difficulty in cultivation of lepra bacilli necessitates the need for continuous surveillance, early diagnosis and robust susceptibility testing. Furthermore, prompt management and comprehensive rehabilitation would help reduce the disease burden and improve the quality of life in chronic cases.

POSTERS

PP 1

FROM FLORA TO FLESH: ODISHA'S FIRST DOCUMENTED CASE OF HUMAN Pestalotiopsis INFECTION

Dr Siddhant Ray,

2nd Year Pg Resident, MKCG MCH

INTRODUCTION:

Mycetoma is a slowly progressive, chronic skin and subcutaneous infection, characterized by the symptomatic triad of tumefaction, sinuses, and granules primarily caused by fungi or bacteria. Pestalotiopsis is a dematiaceous, appendage-bearing phytopathogen commonly seen in soil and plant material and very few have been associated with human infections. They are acquired by traumatic implantation. This report documents the first known case of mycetoma caused by Pestalotiopsis in Odisha.

OBJECTIVE:

To report a rare case of subcutaneous mycosis (mycetoma) caused by Pestalotiopsis spp. and highlight the diagnostic challenges.

MATERIALS & METHODS:

A 45-year-old female vegetable vendor with a history of trauma from a thorn presented with a swollen foot and multiple lesions. Clinical samples were examined via microscopy, culture, and morphological analysis. Fungal identification was based on colony characteristics and microscopic features observed in LPCB staining.

RESULT:

Direct KOH mount revealed fragmented hyphal elements. Fungal cultures on Potato Dextrose Agar and corn meal agar grew white to tan-coloured colonies. Slide culture induced sporulation, revealing fusiform, five-celled conidia with apical appendages characteristic of Pestalotiopsis. The patient recovered after receiving systemic Itraconazole therapy.

CONCLUSION:

To the best of our knowledge, this represents the first reported case of mycetoma due to Pestalotiopsis species in Odisha. The case highlights the clinical significance of recognizing rare phytopathogenic fungi as potential causative agents of subcutaneous mycoses, particularly following traumatic inoculation. Accurate identification through meticulous culture-based methods and morphological characterization remains critical for the diagnosis and effective management of such uncommon fungal infections.

PP 2

UNMASKING LEPTOSPIROSIS: A CASE OF MISDIAGNOSED FEBRILE ILLNESS

Dr Shibashis Sahoo

2nd Year PG Student, MKCGMCH

INTRODUCTION:

Leptospirosis is a globally important zoonotic disease caused by pathogenic spirochetes of the genus Leptospira. It is endemic in tropical & subtropical regions, with transmission typically occurring through exposure to water or soil contaminated with urine from infected animals. Clinical presentation ranges from mild febrile illness to severe forms like Weil's disease, characterized by jaundice, renal failure & hemorrhagic manifestation. Due to its non-specific symptoms & similarity to other febrile illnesses, Leptospirosis is often misdiagnosed.

OBJECTIVE:

To diagnose a case of leptospirosis presenting as unexplained renal insufficiency & conjugated hyperbilirubinemia, eventually progressing to multiorgan involvement. Material & Methods: A case of suspected Leptospirosis was evaluated in MKCG Medical College & hospital, Berhampur. Clinical evaluation, laboratory testing (CBC, LFT, RFT) & imaging studies were conducted. Dark field microscopy was performed for visualization of motile Leptospira in provided clinical sample. Serological testing was performed using IgM ELISA to detect antibodies specific to Leptospira spp.

RESULT:

A 60-year-old male presented with fever, myalgia, pain abdomen, conjunctival suffusion since 1month & one episode of seizure lasting for 5minutes.Laboratory investigations revealed thrombocytopenia, elevated bilirubin with raised urea & creatinine. Dark field microscopy of blood sample revealed thin, bright, actively motile spirochetes exhibiting characteristic spinning & translational movement, consistent with Leptospira morphology. Serological testing using IgM ELISA was positive, supporting the diagnosis. The patient was treated with intravenous ceftriaxone 1g BD for 5days & supportive care for hepatic & renal dysfunction was provided. Clinical improvement observed drastically on 5th day & the patient recovered fully without complications.

CONCLUSION:

This underscores the need for high clinical suspicion of leptospirosis especially in the patient presenting with febrile illness & hepatorenal dysfunction. Early diagnosis through serological testing & prompt initiation of antibiotics can significantly reduce morbidity & mortality. Clinicians should remain vigilant to atypical presentation to avoid delay in treatment.

PP 3

EVALUATION OF DIRECT SPUTUM SMEAR EXAMINATION WITH SMEAR EXAMINATION AFTER PETROFF METHOD AND NALC-NaOH METHOD FOR DETECTION OF TUBERCULOSIS, A COMPARATIVE STUDY.

Dr Swapnarani Patel

1st Year PG, Hitech MCH, Rourkela

BACKGROUND-

Tuberculosis remains a major public health concern, particularly in developing countries. Accurate and early detection Mycobacterium tuberculosis in sputum samples is essential for effective disease management. This study aims to compare the efficacy of direct sputum smear microscopy with smear examination after Petroff and NALC-NaOH decontamination methods.

METHODS:

A total 200 sputum samples were collected from suspected TB patients. Each sample underwent 3 type of smear microscopy (1) direct Ziehl- Nelsen (ZN) staining (2) ZN staining after Petroff's method and (3) ZN staining after NALC-NaOH decontamination method. All smear were examined for acid fast bacilli (AFB) and result were compared for sensitivity and positivity rate.

RESULT:

Among the 200 samples, direct smear microscopy detected AFB 96 cases (48%), Petroff method in 118 cases (59%) and NALC-NaOH method in 124 cases (62%). The NALC -NaOH method demonstrated the highest sensitivity in detecting AFB positive samples. Both concentration method significantly improved smear positivity compared to the direct method ($p<0.05$). the Petroff and NALC-NaOH method also showed improved smear quality and reduced background debris, aiding interpretation.

CONCLUSION:

The study concludes that concentration methods, particularly the NALC -NaOH method, significantly enhance the detection rate of mycobacterium tuberculosis in sputum samples. Implementing such techniques in diagnostic laboratories can improve early diagnosis and help curb the spread of TB, especially in high burden settings.

KEYWORDS:

Tuberculosis, sputum smear, Petroff method, NALC-NaOH ,acid fast bacilli, diagnostic sensitivity

PP 4

POST-SURGICAL WOUND INFECTION BY MYCOBACTERIUM FORTUITUM-CHELONEI COMPLEX - A CASE REPORT

Dr Smita Mohanty

1st Year PG, Hitech MCH, Rourkela

INTRODUCTION:

Non-Tuberculous Mycobacteria (NTM) are present ubiquitously in the environment and primarily found in tap water. They are associated with outbreaks in hospital settings, such as post-surgical wound infections, prosthetic device infections, Catheter sepsis, contaminated surgical instruments, and infections in bone marrow transplants. They cause opportunistic infections in hospital settings.

MATERIALS AND METHODS:

A 44-year-old female presented to the surgery OPD with complaints of a mass in the left lower abdomen, with a discharging sinus. Mass was surgically excised and sutured. But the suture was not approximated, and the wound remained the same as before, despite all the blood investigations and histopathological investigations were normal. The patient was referred to the TB and CHEST department for evaluation of tuberculosis.

RESULTS:

Deep tissue with pus was taken for Gram-stain, ZN-stain, bacterial and mycobacterial culture. Findings are as follows- 1. Gram stain- Gram-negative Bacilli, 2. ZN staining - AFB seen, 3. L-J media - growth in less than 7 days with cream coloured, smooth, butyrous colony , 4 . No pigmentation seen. It represents characteristics of rapid growers. So, for further confirmation 4. Mac-conkey agar (without crystal violet) inoculation - growth seen (smooth, dome-shaped colony with slight pink pigmentation) , 5. Blood agar(5% sheep RBC)- tiny pinpoint colonies seen. All these findings confirm the diagnosis of infection by the Mycobacterium fortuitum-chelonei complex. Clarithromycin was added to the patient's previous medication. Then the wound healed itself after repeated dressing without any further surgical procedure.

CONCLUSION:

This case highlights the importance of considering Non-Tubercular Mycobacteria (NTM) in post-surgical wound infections.

PP 5

Bacteriological Profile and Antimicrobial Susceptibility Pattern of Burn Wound Isolates: A Hospital-Based Observational Study.

Dr Ashish Patel

1st year PG, Hitech MCH, Bhubaneswar

Background:

Infections remain a major cause of morbidity and mortality in burn patients, predominantly due to disruption of skin barriers and immune dysfunction. This study aims to explore the bacteriological profile and antimicrobial susceptibility patterns of burn wound isolates in a tertiary care hospital.

Methods:

This hospital-based observational study was conducted in a tertiary care center. Wound swabs were collected from patients admitted with burns at the time of admission and/or on the 3rd and 7th days post-burn. Bacterial isolates were identified using standard microbiological techniques, and antimicrobial susceptibility testing (AST) was performed using Kirby-Bauer disk diffusion method as per CLSI guidelines.

Results:

Of 100 wound swabs, 76 were culture positive Culture. Gram-negative organisms predominated, with Pseudomonas aeruginosa (32%), Klebsiella spp. (18%), and Acinetobacter spp. (15%) being the most frequently isolated pathogens. Among gram-positive organisms, Staphylococcus aureus (28%) was the predominant isolate. Multidrug resistance was notably high in Acinetobacter spp., which retained sensitivity only to colistin and tigecycline. Pseudomonas and Klebsiella showed moderate resistance to cephalosporins and carbapenems. Methicillin-resistant S. aureus (MRSA) constituted approximately 40% of S. aureus isolates.

Conclusion:

Gram-negative bacteria are the predominant pathogens in burn wound infections, exhibiting widespread multidrug resistance. Regular surveillance of local bacterial flora and antimicrobial susceptibility profiles is essential to guide empirical therapy and reduce infection-related morbidity and mortality in burn patients. Keywords: Burn wound infection, antimicrobial susceptibility, Pseudomonas, Acinetobacter, MRSA, Klebsiella.

PP 6

ELIZABETHKINGIA MENINGOSEPTICA: ANTIMICROBIAL SUSCEPTIBILITY PATTERN, RISK FACTOR ASSOCIATION AND OUTCOME IN A TERTIARY CARE HOSPITAL.

Dr Ruchita Sahu

1st Year PG, KIMS

Background:

Elizabethkingia meningoseptica, formerly under Chryseobacterium, is a non-fermenting, oxidase-positive, gram-negative rod known to cause neonatal meningitis and nosocomial infections. It is emerging as a significant pathogen in bloodstream infections (BSI).

Objectives:

1. To estimate the percentage of infection and antibiotic sensitivity pattern of E. meningoseptica. 2. To know the risk factors and clinical outcomes of patient infected by E. meningoseptica.

Materials and Methods:

This retrospective cross-sectional study was conducted in the Department of Microbiology, KIMS, Bhubaneswar, from May 1, 2024, to May 31, 2025. All E. meningoseptica culture positive were included. Data were collected from electronic records. Samples were processed as per ICMR SOPs. Identification and antimicrobial susceptibility testing were done using BD or BacT/ALERT and VITEK-2.

Results:

During the study period 21,861 samples were culture positive, out of which 116 (0.53%) were positive for E. meningoseptica. Most common sample was blood 48 (41.37%) followed by respiratory specimens 40 (34.48%). Minocycline exhibited the highest susceptibility among 111 isolates (95.68%), with MIC 50, MIC 90 values of 1 µg/mL and 0.5 µg/mL followed by Levofloxacin showed 54 (46.55%) (MIC 50: 4 µg/mL; MIC 90: 8 µg/mL). The most common resistance pattern observed in 41 isolates, which showed resistance to cephalosporines and beta lactams but sensitive to minocycline. The association of mortality and alcoholism in BSI was found to be statistically significant ($p<0.05$).

Discussion and Conclusion:

Among 116 Elizabethkingia meningoseptica isolates, 48 (41.37%) were from bloodstream infections (BSI), which is notably higher compared to the 14.39% BSI rate reported by Sarathi et al. (2023) as we use VITEK 2 system for identification & AST. The study conclude E. meningoseptica exhibits high levels of resistance to multiple antibiotics, including meropenem, gentamicin, and imipenem—showing almost 100% resistance. Infections were observed in both immunocompromised and immunocompetent patients. These findings underscore the importance of regular patient monitoring and appropriate antimicrobial therapy to reduce the mortality associated with E. meningoseptica infections.

PP 7

RHINO-ORBITAL MUCORMYCOSIS IN AN UNCONTROLLED TYPE 2 DIABETIC COVID-19 PATIENT : A CASE REPORT FROM EASTERN ODISHA

Abhiseka Acharya

1st year , SCBMCH

Introduction:

Mucormycosis, a rare but life-threatening fungal infection caused by Mucoraceae, predominantly affects immunocompromised individuals. India has a high prevalence, estimated at 14 cases per 100,000, often linked to uncontrolled diabetes and steroid use in COVID-19 patients, with Rhizopus being a common culprit.

Case Report:

A 47-year-old man with a 15-year history of type 2 diabetes mellitus presented to SCB Medical College Hospital, Cuttack ENT department, with headache, nasal discharge, and right eye discharge since last 1 Month. He had past history of COVID-19 infection requiring ICU admission and had received one dose of Covaxin. Clinical examination revealed right orbital proptosis and eyelid swelling of size (2x3cm).

Diagnostic workup:

Nasal and paranasal sinus tissue collected by endoscopy were sent to the Microbiology Department SCB MCH. The tissue was crushed between two slides. A KOH mount showed broad, sparsely septate, ribbon-like hyphae with right-angle branching.The tissue was cultured on Sabouraud Dextrose Agar tubes n incubated at 25°C and 37°C On 3rd day white, cottony colonies with a “salt-and-pepper” appearance was seen covering allmost all the tube. A Lactophenol cotton blue (LPCB) mount showed broad, aseptate hyaline hyphae, long unbranched sporangiophores with dark, round sporangia, and rhizoids at the nodal region identifying the organism as Rhizopus.

Treatment:

The patient received antifungal therapy such as liposomal Amphotericin-B 5mg\kg\day intravenously for 10 days followed by posaconazole (PCZ) at 5 mg/kg once daily for one month. On follow up headache subsided after 20 days. He was discharged with a prescription for two additional weeks of posaconazole.

Conclusion:

Mucormycosis is a rare fungal infection in a healthy individual , but in DM it can cause severe complications.Early diagnosis and aggressive treatment are essential for a better prognosis, as the rapidly progressive nature of mucormycosis can be fatal for the patient

PP 8

A CASE OF PENICILLIN RESISTANT NEISSERIA GONORRHOEAE ISOLATED FROM A YOUNG MALE WITH URETHRAL DISCHARGE

Sonali Priyadarshini

1st year PG, SCBMCH

INTRODUCTION:

Gonorrhoea is a current public health problem worldwide, being the second most prevalent sexually transmitted bacterial infection. It is caused by Neisseria gonorrhoeae which colonizes and infects in genital tract, the rectal mucosa and oropharyngeal mucosa. Mainly presents as urethritis in men (76%) and cervicitis in female (24%). Plasmid encoding TEM type ß-lactamases, which produces high level penicillin resistance have increasing spread with gonococcal infection. Inadequately treated or untreated cases are at the risk of developing Epididymal orchitis & serious complication like Disseminated gonococcal infection, meningitis & endocarditis.

CASE REPORT:

A 25-year-old unmarried male presented to the Dept of Skin & VD with chief complain of dysuria & urethral discharge for 4 days. He was involved in unprotected intercourse with multiple partners for 3 years. He was sent to Department of Microbiology for further evaluation.

MATERIALS AND METHODS:

Area around the opening of urethra was cleaned with normal saline.Then the urethra was gently milked allowing the mucopus to be collected at the urethral meatus. Impression smear was done on a clean slide for gram stain, and another sample was collected using Dacron swab and immediately inoculated on Blood agar, placed in a Candle jar and incubated at 37° C. Gram stain showed plenty of pus cells and gram-negative intracellular diplococci, suggestive of Neisseria gonorrhoeae. After overnight incubation, Blood agar showed greyish white glistening pinpoint colonies. The organism was susceptible to cefixime, erythromycin, ceftriaxone, ciprofloxacin, doxycycline, ampicillin & azithromycin & resistant to penicillin.

TREATMENT AND FOLLOW UP:

The patient received a single dose of injection ceftriaxone 250mg IM and tab Azithromycin 1gm. He was advised to avoid sexual contact and his sexual partner was also counselled and treated. On follow up his discharge reduced significantly within 2 days of treatment.

CONCLUSION:

Improvements in access to appropriate testing, diagnostics, antimicrobial susceptibility, surveillance, treatment and follow up of gonorrhoea patients are essential in controlling gonorrhoea and to prevent the spread of drug-resistant gonorrhoea.

PP 9

BACTERIOLOGICAL PROFILE OF PLEURAL FLUID IN EMPYEMA THORACIS IN A TERTIARY CARE CENTER.

Priyanka Mandal

1st Year PG, VIMSAR

INTRODUCTION:

Empyema thoracis is the accumulation of purulent fluid in the pleural cavity, that remains a significant cause of morbidity and mortality. This study aims to evaluate the bacteriological profile of pleural fluid in empyema patients admitted to a tertiary care centre.

AIM AND OBJECTIVES:

To study the bacterial isolates and their sensitivity pattern of pleural fluid.

MATERIALS AND METHODS:

A hospital based retrospective study was done from February 2025 to June 2025 at Department of Microbiology VIMSAR, Burla. Samples were collected aseptically. Bacterial identification and antibiotic susceptibility testing were performed using standard microbiological techniques and the Kirby-Bauer disc diffusion method as per CLSI guidelines.

RESUL:

Among 75 pleural fluid samples cultured ,35 samples (47%) showed positive bacterial growth. Among the bacterial isolates ,17 isolates were Pseudomonas species (49%), 08 isolates were Klebsiella species (23%), 04 isolates were Staphylococcus species (11%) ,04 isolates were Acinetobacter species (11%) and 02 isolates were Citrobacter (6%) Antimicrobial susceptibility result showed that, 87% of Pseudomonas species were sensitive to Imipenem and 83% were sensitive to Piperacillin -tazobactam. Klebsiella species had a sensitivity of 84% to meropenem and 82% to Piperacillin -tazobactam. Gram-positive isolates were 95% sensitive to Linezolid and 90 % sensitive to Erythromycin.

CONCLUSION:

From our study we conclude that Pseudomonas species and Klebsiella species are the most common pathogens of pleural fluid in cases of empyema, with significant sensitivity to Imipenem followed by Piperacillin-tazobactam. Early microbiological diagnosis and tailored antibiotic therapy are essential for improved clinical outcome. Routine culture and sensitivity testing should be an integral part of empyema managemnt protocols in tertiary care settings.

PP 10

BACTERIOLOGICAL PROFILE AND ANTIBIOGRAM OF AURAL DISCHARGE

Dr R Dhanush

1st Year PG, VIMSAR

BACKGROUND:

Aural discharge, or ear discharge, can be caused by several factors, including ear infections (otitis media or externa), eardrum perforation, or the presence of foreign objects in the ear. Conditions like cholesteatoma, trauma to the ear, and complications from ear surgery may also result in discharge. If accompanied by pain or hearing loss, medical attention should be sought for proper diagnosis and treatment. The inappropriate use of antibiotics has resulted in the development of antibiotic resistance.

OBJECTIVE:

This study aimed to identify bacterial isolates from aural discharge and to determine their susceptibility pattern.

METHODS:

This retrospective study was conducted in the Department of Microbiology, Veer Surendra Sai Institute of Medical Science, Burla, Odisha between March 2025 and June 2025. Fifteen aural swabs with discharge were collected and processed. The collected samples were cultured using standard techniques in a medical microbiology laboratory. The isolated bacteria were identified by colony morphology, gram staining, and biochemical reactions. Antibiotic susceptibility was tested by Kirby Bauer disc diffusion methods as per the National Committee for Clinical Laboratory Standards guidelines.

RESULT:

A total of 15 aural discharges were collected, among all patients with aural discharge (40%) were culture positive. Among 40% bacterial growths, the majority of culture-positive cases were in the age group 20-40 years (40%), and of them 13.33% were female. Pseudomonas spp. (50%) was the prevailing isolate, followed by Staphylococcus aureus (50 %). Among Gram-negative isolates, Pseudomonas spp. showed higher sensitivity to piperacillin-tazobactam, and good sensitivity to meropenem, cefepime. And exhibited higher resistance to cephalosporins, monobactams, trimethoprim- sulfamethoxazole. Among the gram-positive isolates, Staphylococcus aureus exhibited highest susceptibility to linezolid and vancomycin (100%), followed by gentamicin (50.0%) and Doxycycline (50%). High levels of resistance were observed to Cotrimoxazole,Erythromycin, Penicillin and Ciprofloxacin. About 13.33% of Staphylococcus aureus were methicillin resistant (MRSA) which were sensitive to gentamicin, vancomycin, and linezolid.

CONCLUSION:

The findings of this study reveal a significant isolation rate from aural samples, highlighting an

alarming increase in antibiotic resistance among both gram-positive and gram-negative bacteria, which could result in treatment failures. These results underscore the necessity for judicious use of antimicrobials in managing ear infections whether acute suppurative otitis media or chronic suppurative otitis media and the implementation of an antimicrobial stewardship program in tertiary care hospitals across Odisha.

KEYWORDS:

CSOM, ASOM, aural discharge, bacterial pathogens, antimicrobial resistance

PP 11

PREVALENCE AND ANTIBIOTIC SENSITIVITY OF NON-LACTOSE FERMENTERS CAUSING URINARY TRACT INFECTION AMONG IN-PATIENTS IN VSSIMSAR, BURLA

Dr. Pratyush Kumar Pramanik

1st Year PG Trainee, VSSIMSAR, Burla.

Introduction:

Urinary tract infection (UTI) refers to infections involving any part of the urinary system and poses a significant public health issue. It is caused by a variety of pathogens, with high recurrence rates and increasing antimicrobial resistance contributing to its economic burden. Non-lactose fermenting Gram-negative bacteria are increasingly recognized as significant UTI pathogens, especially in patients with comorbid conditions.

Material & Methods:

A retrospective study was conducted using data from February to June, 2025. Clean catch midstream urine was collected in a wide mouthed leak proof sterilized container. Culture and bacterial identification were done using standard microbiological guidelines. Antibiotic sensitivity test was performed by Kirby-Bauer disc diffusion method following clinical and laboratory standards institute (CLSI) guidelines.

Results:

Among 1475 samples, 315 (21.35%) were positive for bacterial infection. Out of 315 positive cases, 76 (24.12%) were non-lactose fermenters. Among non-lactose fermenters causing Urinary tract infection, the most common organism was Pseudomonas species 29 (38.15%) which was more sensitive to Cefepime 56.04% followed by Piperacillin-tazobactam, Ceftazidime and Imipenem. Other organisms isolated include Acinetobacter species 24 (31.57%), Citrobacter species 17 (22.36%) and Proteus species 6 (7.89%) respectively.

Conclusion: The most common non-lactose fermenter causing urinary tract infection among hospitalised patients was Pseudomonas species which is more sensitive to Cefepime.

PP 12

BACTERIOLOGICAL PROFILE OF ENDOTRACHEAL TUBE ASPIRATE IN VENTILATOR-ASSOCIATED PNEUMONIA (VAP)

Dr. Biswanath Satapathy

1st year PG , VIMSAR

Introduction:

Ventilator-associated pneumonia (VAP) is a common and serious infection in patients on mechanical ventilation, leading to increased morbidity, mortality, and healthcare costs. Timely diagnosis and appropriate treatment are essential. Analysis of endotracheal tube (ETT) aspirates is a key diagnostic method, revealing the bacterial pathogens responsible for infection. Common organisms include Pseudomonas aeruginosa, Klebsiella pneumoniae, Acinetobacter baumannii, and Staphylococcus aureus. The bacteriological profile and antibiotic resistance patterns vary by region and over time. This study aims to identify the microbial spectrum and drug sensitivity of ETT aspirates in VAP patients to guide effective treatment and infection control strategies.

Objective:

To determine the bacteriological profile of endotracheal tube aspirates in patients with clinically suspected ventilator-associated pneumonia and assess the antimicrobial susceptibility patterns of the isolated organisms.

Materials & Methods:

This prospective study was conducted in the ICU of VIMSAR,BURLA on patients aged =18 years who were mechanically ventilated for over 48 hours and clinically suspected of ventilator-associated pneumonia (VAP). ETT aspirates were aseptically collected and analyzed using Gram staining, culture, and biochemical methods. Antimicrobial susceptibility testing(AST) was performed using the Kirby-Bauer disk diffusion method as per CLSI guidelines. Patients with pre-existing pneumonia, prolonged antibiotic use, or immunosuppression were excluded. Data were analyzed using [Excel sheet], with significance set at $p<0.05$. The study aimed to determine bacterial pathogens and resistance patterns in VAP cases.

Results:

A diverse range of pathogens were isolated, with Gram-negative bacteria predominating. Common isolates included Pseudomonas aeruginosa, Klebsiella pneumoniae, Acinetobacter baumannii, and Escherichia coli. Gram-positive organisms such as Staphylococcus aureus, including MRSA, were also detected. Many isolates exhibited multidrug resistance, highlighting the need for targeted therapy guided by culture and sensitivity results.

Conclusion:

The bacteriological analysis of ETA provides critical insights into the microbial etiology of VAP. Regular surveillance of pathogens and their resistance patterns is essential for guiding empirical therapy and implementing effective infection control strategies in ICUs.

PP 13

BACTERIOLOGICAL PROFILE AND THEIR ANTIMICROBIAL SUSCEPTIBILITY PATTERN IN WOUND INFECTIONS

Dr Dolly Chhanda

1st year, VIMSAR

BACKGROUND:

Wound infections are a major barrier to healing often leading to increased morbidity and prolonged hospital stay. Wound swabs obtained from skin and soft tissues infections are crucial in identifying causative microorganisms and guiding appropriate antimicrobial therapy. Rising antimicrobial resistance complicates the empirical treatment.

OBJECTIVES:

This sturdy aimed to identify aerobic bacterial isolates from wound infections and to determine their susceptibility pattern.

METHODS:

A prospective study was conducted in the department of Microbiology, Veer Surendra Sai Institute of Medical Sciences And Research, Burla .Wound infection samples i.e. pus, exudates were sampled aseptically and analyzed using Gram staining, cultured on standard media *(eg. Blood agar, MacConkey agar)* and subjected to antimicrobial susceptibility testing via Kirby Baurer disc diffusion method as per CLSI guidelines. Data were analyzed using (Excel Sheet), with significance set at $p<0.05$.Organisms were identified eg- Staphylococcus aureus, Klebseilla spp ,Pseudomonas spp,Enterococcus, Escherichia coli and assessed for resistance patterns and prevalence of multi drug resistance.

RESULTS:

Culture positivity rates was high with polymicrobial or monomicrobial growth. Gram negative bacilli *(eg. Klebseilla, Pseudomonas, Escherichia coli)* often predominate whereas Gram positive cocci *(Stahylococcus aureus, Enterococcus)* also share a major portion. Staphylococcus aureus shows notably Methicillin resistance. In Gram Negative, resistance is high for Beta lactams, fluoroquinolones and Aminoglycosides while Carbapenem, Colistins, Piperacillin –tazobactam and Amikacins remained more effective.

CONCLUSION:

The inference drawn from this study reveals a significant isolation rate from wound swabs, highlighting an alarming increase in the antibiotic resistance among both Gram positive and Gram negative bacteria which could result in treatment failure. High prevalence of Gram negative infections and widespread antibiotic resistance reaffirm the necessity of routine wound swab culture. The result emphasizes the necessity for judicious use of antimicrobials in managing wound infections. Carbapenem,Vancomycin Linezolid remains critical agents, but stewardship measures are urgently needed to preserve their efficacy.

PP 14

DOUBLE TROUBLE: UNRAVELING MTB AND NTM CO-INFECTIONS

Dr Kavita Sharma

2nd year PG, Apollo Hospitals

Background:

The simultaneous detection of Mycobacterium tuberculosis (MTB) and non tuberculous mycobacteria (NTM) poses a significant diagnostic and therapeutic challenge, particularly in tuberculosis (TB)-endemic regions. With the increasing use of molecular assays such as the M10 SD Biosensor, incidental or clinically relevant detection of NTM alongside MTB has become more frequent—raising important questions about colonization versus true co-infection.

Objectives:

To detect co-infection of MTB and NTM in immunocompromised patients using both conventional method and multiplex PCR in order to provide rapid and effective treatment.

Methods:

A 62-year-old male with CKD, diabetes and hypertension presented with high-grade fever, altered sensorium and oliguria. AFB stain was positive, and cultures confirmed both organisms. Sputum tested via M10 SD Biosensor showed co-detection of MTB and NTM. Line probe assay identified M. avium complex. Treatment included anti-TB drugs and a macrolide-based NTM regimen with renal adjustments.

Results:

Despite initial anti-TB therapy, the patient showed persistent symptoms. Radiological findings and culture confirmation of NTM supported true co-infection. Addition of macrolide-based therapy led to gradual clinical improvement. The patient responded well to dual therapy over a monitored course, with radiological resolution seen at 3 months.

Conclusion:

Accurate differentiation between colonization and true infection is critical to avoid misdiagnosis and inappropriate therapy. Integrating molecular tools with clinical judgement and culture results enables timely, tailored management—even in resource-limited, TB-endemic settings—ultimately improving patient outcomes.

PP 15

CONGENITAL SYPHILIS – A CALL FOR VIGILANCE

Dr Lopamudra Mishra

2nd year PG, MKCG MCH

Introduction:

Congenital syphilis remains a significant public health issue, particularly in low-resource settings where antenatal care may be inadequate or absent. This case series highlights the diagnostic utility of combined direct and serological methods in confirming congenital syphilis in neonates.

Aims and Objectives:

This study aims to confirm a diagnosis of clinically suspected cases of congenital syphilis by using dark ground microscopy, staining and modern serological and molecular tools to emphasize the importance of integrated diagnostic modalities for comprehensive management.

Methods:

Neonates suspected of congenital syphilis were evaluated using a multimodal laboratory approach. Direct detection was performed using dark ground microscopy (DGM) and Giemsa staining of whole blood. Serological investigations included the non-treponemal Rapid Plasma Reagin (RPR) test, the treponemal Treponema pallidum hemagglutination assay (TPHA), and the IgM enzyme-linked immunosorbent assay (IgM ELISA).

Results:

All neonates tested showed consistent positivity across the full diagnostic panel. DGM confirmed the presence of T. pallidum by visualizing motile spirochetes, while Giemsa stain revealed their characteristic morphology. RPR was reactive in all cases, indicating active infection and aiding in disease monitoring. TPHA was strongly positive, confirming treponemal exposure. Importantly, IgM ELISA was reactive in all neonates, indicating endogenous antibody production.

Conclusion:

This case series underscores the utility of a comprehensive diagnostic panel in confirming congenital syphilis. The simultaneous positivity of DGM, Giemsa, RPR, TPHA, and IgM ELISA provides robust evidence for in utero transmission. IgM ELISA, in particular, holds diagnostic value in neonates, differentiating true congenital infection from passive transfer of maternal antibodies.

PP 16

CO-INFECTION OF GROUP A STREPTOCOCCUS AND EPSTEIN BARR VIRUS IN A PATIENT PRESENTING WITH ACUTE PHARYNGITIS- AN UNCOMMON PRESENTATION

Dr Sushree Padmaja Pradhan
Prof HOD Dr Dharitri Mohapatra, Dr Somi Patro

Introduction:

Group A streptococci (GAS) and Epstein Barr virus (EBV) are two pathogens that are well-known to cause acute pharyngitis. Co-infection with GAS and EBV has rarely been reported in immunocompetent adolescents.

Case Presentation:

A 13-year-old female from Kendrapara presented to local physician with history of fever, sore throat, otalgia for five days was prescribed Paracetamol and Azithromycin. The antibiotic was changed to Amoxiclav but the symptoms did not subside, hence the patient was referred to the Department of Paediatrics SCB MCH Cuttack. On examination bilateral tonsils were inflamed, whitish membrane over tonsils extending towards pharynx along-with bilateral cervical lymphadenopathy. Immunization history including DPT was inadequate.

Diagnostic Workup:

Scraping of membrane over tonsils (easily scraped out without bleeding) for Gram stain, Albert stain, culture on blood agar and Loeffler serum slope. Gram stain showed epithelial cells, plenty of pus cells, plenty of Gram-positive cocci in pairs and chains. On Albert stain bacilli resembling Corynebacterium diphtheriae were not seen. On Loeffler serum slope no organisms isolated. On blood agar small pinpointed colonies with clear zone of beta haemolysis which was Bacitracin sensitive and identified as Streptococcus pyogenes. Blood sample was collected and centrifuged to separate serum. The serum sample was subjected for real time PCR (TRUPCR Neuro panel kit), from which Epstein Barr virus was detected.

Treatment and Follow-up:

The patient was treated with inj Ceftriaxone 1mg iv bd for 5 days and Valacyclovir 1000mg bd for 5 days and Chlorhexidine mouth wash. On follow up the patient showed significant remission of symptoms and clearing of membrane by 15th day.

Conclusion:

General physician should consider the co-infection of GAS and EBV when symptoms did not subside following appropriate treatment.

PP 17

CLINICAL AND BACTERIOLOGICAL ASSESSMENT OF BLOODSTREAM INFECTIONS IN A TERTIARY CARE HOSPITAL OF ODISHA

Dr Srusti Dash

1st year PG, SCBMCH

Introduction:

Bloodstream infections (BSIs) are a major contributor to sepsis and carry high morbidity and mortality worldwide. Blood culture remains the gold standard for identifying causative organisms and guiding targeted antimicrobial therapy.

Materials and Methods:

This prospective study was conducted in the Department of Microbiology at SCB Medical College & Hospital, from February to June 2025. A total of 1145 blood samples were aseptically collected in two sets from clinically suspected BSI cases. Each sample (2–4 ml) was inoculated into BacT/ALERT culture bottles and processed using the BacT/ALERT 3D automated system. Flagged positives were subcultured onto blood agar and MacConkey agar and incubated at 37°C for 24–48 hours. Organisms were identified and subjected to antimicrobial susceptibility testing (AST) using the VITEK-2 system. Patient data and microbiological profiles were analyzed.

Results:

Out of 1145 blood culture samples included, the predominant pathogens were Gram-negative bacteria, with Klebsiella pneumoniae (28%), followed by Acinetobacter baumanii(5%) and Burkholderia cepacia (4%). All three were found to be most sensitive to Cotrimoxazole, while being most resistant to ertapenam, minocycline and gentamicin respectively. Among Gram-positive isolates, Staphylococcus aureus was the leading pathogen (3%).The age group 0-18 yrs showed maximum number of BSI cases. The incidence among male and female was 53% and 47% respectively.

Conclusions:

A detailed analysis of prevalence, etiology of BSIs in India and its resistance profile is crucial for appropriate antibiotic use, clinical management, and formulation of antibiotic policies and preventive measures.

PP 18

COMPARATIVE MICROBIOLOGICAL EVALUATION OF ENDOTRACHEAL ASPIRATES AND TUBE CULTURES IN MECHANICALLY VENTILATED PATIENTS- A CROSS-SECTIONAL COMPARATIVE STUDY

Dr Deepti Pradhan

1st Year PG, Hitech MCH, Bhubaneswar

INTRODUCTION:

Respiratory infections are a major cause of morbidity and mortality in mechanically ventilated patients. Early diagnosis and prompt administration of appropriate antibiotics are crucial for management. Hence, understanding the microbiological profile and antimicrobial susceptibility patterns is essential.

OBJECTIVE:

To determine the microbial etiology in endotracheal (ETT) tips and tracheal aspirates of mechanically ventilated patients and to analyze their antimicrobial resistance patterns.

MATERIAL AND METHORDS:

This study was conducted in the Microbiology Department, Hi-Tech MCH Bhubaneswar (April–May 2025). A total of 60 samples (30 ETT tips and 30 tracheal aspirates) from patients ventilated for more than 48 hours were processed. Samples were gram- stained and cultured on blood and Mac-Conkey agar. Isolates were identified using standard microbiological methods, and antibiotic susceptibility testing was performed by the Kirby-Bauer disc diffusion method according to CLSI guidelines.

RESULTS:

Out of 60 specimens, 50 showed microbial growth while 10 were sterile. Among the isolates, 34 were gram-negative, 3 gram-positive, 2 were yeasts, and 6 had poly-microbial growth. The most common gram-negative organisms were Acinetobacter baumannii (20), Klebsiella pneumoniae (14), E. coli (3), and Pseudomonas aeruginosa (2). Most gram-negative isolates were sensitive to colistin, tigecycline, polymyxin B, and meropenem. All Staphylococcus aureus isolates were MRSA and sensitive only to vancomycin, linezolid, clindamycin, and gentamicin.

CONCLUSION:

A high prevalence of multidrug-resistant organisms, particularly Acinetobacter, Klebsiella, E. coli, Pseudomonas, and MRSA, was observed. These findings highlight the urgent need for stringent antibiotic stewardship and targeted infection control strategies in ICUs to curb antimicrobial resistance and improve patient outcomes.

KEYWORDS: Endotracheal aspirates, mechanically ventilated patients, antimicrobial susceptibility, antibiogram, ventilator-associated pneumonia.

PP 19

A STUDY TO EVALUATE CATHETER ASSOCIATED URINARY TRACT INFECTION(CAUTI) IN INTENSIVE CARE UNIT AT A TERTIARY CARE HOSPITAL

Dr Manoswini Mallick

1st Year PG, Hitech MCH

INTRODUCTION:

Catheter associated Urinary Tract infection is defined as UTI that develops in a patient with an indwelling urinary catheter in place for 48 hours or more. CAUTI has been associated with increased mortality, morbidity and length of hospital stay. It accounts for almost half of Hospital acquired infection. It is associated with various risk factors such as age, diabetes mellitus, duration of hospital stay, etc. It is classified into 2 types based on clinical manifestations. 1.CAUTI with symptomatic bacteriuria 2.Catheter associated asymptomatic bacteriuria {CA-ASB}.

OBJECTIVES:

1.To evaluate the risk factors contributing to CAUTI 2.To study bacteriological profile and antibiotic susceptibility pattern of isolated pathogens.

MATERIAL AND METHODS:

This study was conducted in the Dept. of Microbiology, HMCH, BBSR for a period of 2 months (May-June, 2025). Patients who are clinically suspected to have CAUTI were included. Patients having urine culture positive before catheterisation and children below 14years of age are excluded. After taking proper consent from patients, a detailed history of all risk factors , comorbidities, samples were collected under aseptic conditions.. Later, samples were inoculated on Blood agar, MacConkey agar, Nutrient agar and colonies were identified by biochemical test and antibiotic susceptibility testing (KIRBY- BAUER method) was done according to CLSI guidelines.

RESULT:

In this study, CAUTI rate was 9.4 per 1000 catheter days. It was predominantly reported in age group of 51-70years(32%)of age. Most common organism isolated was E.coli(42.85%). The most common risk factor casuing CAUTI was prolonged catheterisation(35.71%).

CONCLUSION:

This study provided a baseline on CAUTI rate. The focus is on shortening the duration of catheter placement and by implementing best practices to prevent and curb down the incidence of CAUTI .

KEYWORD:

CATHETER ASSOCIATED UTI, URINARY TRACT INFECTION, AST

PP 20

WHEN COMMON PRESENTATIONS CONCEAL UNCOMMON DIAGNOSIS- PEDIATRIC CASE OF STAPHYLOCOCCAL SCALDED SKIN SYNDROME

Dr Deepshikha Lenka

1st year PG, SCBMCH

INTRODUCTION:

Staphylococcal scalded skin syndrome (SSSS) is a rare but significant exfoliative dermatosis caused by specific strains of Staphylococcus aureus producing exfoliative toxins, particularly heat-stable toxin A. These target desmoglein-1 in the superficial epidermis, resulting in diffuse erythema, flaccid bullae, and sheet-like desquamation. Early stages often mimic viral exanthems, delaying diagnosis and treatment.

CASE REPORT:

We report a case involving a 7-month-old infant girl admitted in the paediatrics department with extensive erythematous patches and desquamation over the trunk, periorificial, and flexural areas. The condition began with scattered erythematous maculo-papular rash on the face and neck, accompanied by mild fever and rhinorrhoea. Initial evaluation at a private clinic led to the misdiagnosis of viral exanthem, and treatment with oral paracetamol and antihistamines was initiated. However, the lesions progressed, developing flaccid bullae that ruptured, exposing raw areas of exfoliation.

DIAGNOSTIC EVALUATION:

Microbiological evaluation was done from nasopharyngeal swab, conjunctival swabs, blood samples, and skin swab. On gram staining of skin swab and nasopharyngeal swab gram positive cocci arranged in clusters were seen. Also after inoculating on blood agar , Nutrient agar and Mannitol salt agar , beta hemolytic colonies , and golden yellow colonies are grown respectively. Slide coagulase test was positive. Antibiotic susceptibility testing confirmed methicillin-sensitive Staphylococcus aureus (MSSA), with sensitivity to clindamycin, tetracycline, and erythromycin. Culture from all other samples was sterile .

TREATMENT:

Treatment included intravenous fluids, analgesics and IV clindamycin (10 mg/kg/dose 8hourly). Re-epithelisation started by day 5 of treatment and on day 8 the child showed marked improvement and was discharged in stable condition.

PP 21

IMMUNIZATION TO INFECTION – A RARE CASE OF MYCOBACTERIUM BOVIS ISOLATED FROM VACCINATION SITE IN HYPER IGE SYNDROME

Dr. Prachi Prabha Sahu, Dr. Dharitri Mohapatra & Dr. Soumya Sibani Sahoo

Institution: S.C.B. Medical College and Hospital, Cuttack

Introduction:

Hyper IgE Syndrome (HIES), also known as Job's syndrome is a rare primary immunodeficiency characterised by elevated serum IgE levels, recurrent skin and pulmonary infections and characteristic facial features. A BCG scar infection is suggestive of underlying immunodeficiency.

Case Presentation:

We report a case of an 11 months 28 days old female child who presented to the pediatric department with a history of recurrent staphylococcal infections throughout the body, severe ulceration and granulomatous lesion at the site of BCG inoculation and pleural empyema.

Diagnostic Work up:

Pus discharge from the BCG scar was collected with aseptic procedures using sterile swab and sent for Gram stain, ZN stain and KOH mount. The Gram stain revealed pus cells, while the ZN stain showed plenty of acid-fast bacilli along with the pus cells. The KOH mount showed no fungal elements. CBNAAT test was performed, which came positive for Mycobacterium tuberculosis complex (MTBC) with high bacilli load and susceptible to rifampicin. It was cultured in Lowenstein Jensen medium (LJ). Other investigations revealed marked elevated serum IgE that is >1800 IU/ml, leukocytosis with eosinophilia and neutrophilia. The colonies in LJ medium that appeared after 5wks were small, smooth, non-pigmented (buff coloured). Smear from the colony was stained using ZN stain which showed acid fast bacilli. Further negative result in nitrate reductase test concluded the pathogen as Mycobacterium bovis.

Treatment:

The anti-tubercular regimen was started. Supportive care including adequate nutrition, wound management were provided.

Conclusion:

The identification of Mycobacterium bovis from a BCG scar in a child with Hyper IgE syndrome highlights the importance of microbiological vigilance in immunodeficient patients. Early detection and targeted therapy is essential for favorable outcomes.

PP 22

MISLEADING THE GUT: A CASE OF CHRONIC GIARDIASIS CAMOUFLAGED AS ILEOCOLONIC ULCER WITH LYMPHADENOPATHY IN AN IMMUNOCOMPETENT PATIENT

Dr Ankita Patra[1], Dr Rajashree Panigrahy[1], Dr Swaroop Pattnaik[2], Dr Punyatoya Kar[1], Dr Pratikshya Mahapatra[1], Dr Swati Mishra[1].

1st year PG.

[1]Department of Microbiology, IMS & SUM hospital, Bhubaneswar, Odisha

[2]Department of Gastroenterology, IMS & SUM hospital, Bhubaneswar, Odisha.

Introduction:

Giardiasis, a common protozoal infection, typically presents with nonspecific gastrointestinal symptoms like diarrhoea, abdominal discomfort, malabsorption. Rarely, chronic cases in adults mimic colitis, irritable bowel syndrome, or even malignancy, leading to diagnostic errors and inappropriate therapy.

Objective:

To emphasize the diagnostic challenges posed by Giardiasis masquerading as colitis and underscore the importance of considering infectious aetiologies in patients with chronic gastrointestinal symptoms.

Material and Methods:

A 39-year-old male presented with a 12-day history of chronic diarrhoea, lower abdominal pain and anorexia; not associated with fever, vomiting, jaundice, hematemesis or melena. He had no known comorbidities like hypertension, diabetes, thyroid disorder. Laboratory investigations were within normal limits, however stool microscopy revealed actively motile *Giardia lamblia* trophozoites and cysts.

The patient, a sanitation worker, had a history of ileocolonic ulceration with mesenteric lymphadenopathy diagnosed ten months earlier through endoscopy, histopathology, and imaging. These evaluations showed nonspecific inflammation and erosions, with no definitive etiology. The only consistent finding was demonstration of *Giardia lamblia* in stool microscopy, and he was treated with a three-day regimen of drug nitazoxanide.

Despite therapy, symptoms persisted intermittently, so appropriate investigations were done to rule out malignancy or Koch's etiology in the recent visit.

Results:

Persistent parasitological evidence in stool routine microscopy in the current visit, despite earlier antiparasitic therapy, led to metronidazole initiation, resulting in marked symptomatic improvement.

Conclusion:

Giardia lamblia is typically localized to the duodenum and is rarely associated with ileocolonic ulceration or lymphadenopathy. Chronic giardiasis may mimic malignancy or inflammatory bowel disease, particularly in endemic areas. Hence, early detection is essential to prevent misdiagnosis and to avoid erroneous management.

PP 23

UTILITY OF GRAM STAIN AS A RAPID BEDSIDE DIAGNOSTIC TOOL IN RESPIRATORY TRACT INFECTIONS AT A TERTIARY CARE CENTER

Dikshya Bhuyan

1st year, IMS-SUM Hospital, Bhubaneswar

Introduction:

Respiratory specimens collected from critically ill patients remain one of the most important clinical specimens to screen and diagnose the most probable pathogen causing illness. Gram stain of such specimens becomes the first line screening test in deciding the empirical therapy to save valuable lives. In this study we have analyzed the case reports of 100 patients belonging to the age group of 19-59 years (OPD, IPD, Intensive care units) in a tertiary care hospital.

Methods:

This is a retrospective study covering a study period of 6 months where 100 respiratory specimens including sputum (39), tracheal aspirate (16), endotracheal (ET)aspirate(45) were analyzed. All the specimens were first screened for gram staining followed by culture sensitivity. Bartlett's score (in case of Sputum) has been taken into account to quantify the Gram stain.

Result:

A total of 100 respiratory specimens (ET aspirate, tracheal aspirate, sputum)were taken, out of which 38 were sputum. 31.5% sputum specimen were found to be salivary contamination by using Bartlett's score. Out of satisfactory sputum samples (68.42%), both Culture and Gram stain positive was found to be 65.3% followed byboth Culture and Gram stain negative (7.6%), Culture positive Gram stain negative (11.5%) and Culture negative Gram stain positive (15.3%). Among the rest 62samples, 48% contributed to Culture positiveGram stain positive. Co-morbidities like T2DM in patients numbered to 4% and CKD to only 1%. Highest number of specimens (33%) collected in the study were retrieved from Intensive care units (ICU) followed by IPD at 32%.

Conclusion:

Gram stain influences administration of empirical antibiotics reducing unnecessary antibiotic use supporting antimicrobial stewardship practices. It can also help identifying the potential pathogen in limited resource settings.

PP 24

ESCALATING MIC: SILENT PATH LEADS TO VANCOMYCIN RESISTANCE - A RETROSPECTIVE STUDY IN A TERTIARY CARE HOSPITAL IN ODISHA

Dr Subhasish Saha[1], Dr Lipika Jena[1], Dr Abhipsa Mohapatra[1], Dr Priyadarshini Bhoi[1], Dr Gargi Das[1], Dr Kundan Ku Sahu[1], Dr Sumesh Kumar Dash[2]

PG 1st year

[1]Department of Microbiology, IMS AND SUM HOSPITAL, Bhubaneswar, Odisha

[2]Department of Microbiology, MKCG Medical college, Berhampur, Odisha

Introduction:

MRSA is a major pathogen causes infection in both hospital and community settings. Vancomycin has remained the first choice for MRSA infection. However, with the extensive use, reports on the emergence of MRSA strains with reduced susceptibility to vancomycin have also increased.

Aim and Objective:

1. To identify and isolate the MRSA isolate from various clinical sample. 2. To study MIC changes of vancomycin toward vancomycin. 3. To observe the sensitivity pattern of other Anti-MRSA antibiotics.

Material & Methods:

The present was a retrospective study conducted from July 2024 to June 2025 in the central lab of IMS & SUM HOSPITAL, Bhubaneswar, Odisha. The identification and sensitivity of isolates are done in automated ID & AST (Vitek 2 Compact). We analysed data in two parts i.e from July 2024 to December 2024 and January 2025 to June 2025.

Result:

We found that 56 MRSA isolates from various samples, although more MRSA are found in 1st 6 month with but there was shifting MIC50 <=0.5 µg/ml to 1 µg/ml. And also, we found VISA in the 2nd 6moths of the study. In the 1st 6 month 15 (50%) isolates have MIC <=0.5 µg/ml, 10 (33.33%) isolates have MIC 1 µg/ml , 5 (16.66%) isolates have MIC 2 MIC <=0.5 µg/ml in contrast in 2nd 6 months 5 (19.23%) isolates have MIC <=0.5 µg/ml, 15 (57.4%) isolates have MIC 1 µg/ml , 4 (15.38%) isolates have MIC 2 µg/ml & 2 (7.6%) isolates have MIC 4µg/ml.

Conclusion:

During the study period the we observed along with vancomycin other drugs were also sensitive. Also establish that MIC of vancomycin was shifting with in susceptible range and few VISA. This phenomenon may be a significant risk factor for public health, posing additional challenges in managing MRSA infections.

PP 25

INCIDENCE, BACTERIOLOGICAL PROFILE & ANTIBIOTIC SENSITIVITY PATTERN OF VENTILATOR ASSOCIATED PNEUMONIA CASES IN ICU OF TERTIARY CARE HOSPITAL

Dr Vishal Kumar Sahu

1st Year, Hi-Tech Medical College & Hospital Bhubaneswar

INTRODUCTION:

Ventilator Associated Pneumonia [VAP] is defined as pneumonia that develops >48hours after initiation of invasive mechanical ventilation. It is the second most common hospital acquired infection. It is estimated to occur in 9-27% of all mechanically ventilated patients. VAP which develops during first 4 days of mechanical ventilation is early onset VAP & VAP which develops after 5 days of mechanical ventilation is considered as late onset VAP.

OBJECTIVE:

To determine the incidence, bacteriological profile & antibiotic sensitivity pattern of VAP cases in ICU of Hi-Tech Medical College & Hospital Bhubaneswar.

MATERIALS & METHODS:

A study conducted over 2 months period [April &May 2025] on 67 patients aged 15-75 years who were on mechanical ventilation for more than 48hours were included. Patient with pneumonia at admission & below 15 years were excluded. After taking consent from patient relatives, endotracheal aspirates / tips were collected aseptically & analyzed for bacterial growth, identification & antibiotic susceptibility patterns by using Kirby-Bauer disk diffusion method as per CLSI guide lines. The patients were categorized into early onset VAP & late onset VAP cases. VAP cases were identified by using clinical pulmonary infection scoring system [CPIS].

RESULTS:

The incidence of VAP in this study was 11.94% in mechanically ventilated patients. Early onset VAP contribute 37.5% & late onset VAP 62.5% of total VAP cases. Gram negative bacteria were predominant with Klebsiella pneumoniae, Acinetobacter baumannii & Pseudomonas aeruginosa contribute 25% each followed by Escherichia coli 12.5%. Most of them were resistant to commonly used antibiotics.

CONCLUSION:

The study emphasizes correlating culture findings, clinical signs before diagnosing VAP. Judicious antibiotic use, adherence to infection control protocols & implementation to of institutional antibiotic policies are the key to reducing VAP incidence & controlling multidrug resistant infections.

PP 26

MELIOIDOSIS ; 'THE GREAT MIMICKER' WITH DIVERSE PRESENTATIONS

Noureen TV[1], Srujana Mohanty[1], Bijayini Behera[1], Prasanta Raghab Mohapatra[2], Dilip Kumar Samal[3], Rabi Narayanan Sahu[4]

2nd Year

[1]Department of Microbiology, AIIMS Bhubaneswar, [2]Department of Pulmonary medicine, AIIMS Bhubaneswar , [3]Department of otorhinolaryngology, AIIMS Bhubaneswar, [4]Department of Neurosurgery, AIIMS, Bhubaneswar

INTRODUCTION:

Melioidosis, a disease caused by the Gram-negative bacterium Burkholderia pseudomallei, which is present in the environment, is long been considered endemic in several Southeast Asian countries . However, in recent years, Melioidosis have been reported from places other than the classically endemic zones including India. The disease primarily affects individuals who frequently come into contact with soil and water. The clinical manifestations of this severe infection are highly variable, ranging from asymptomatic infections to localized skin infections with or without systemic effects. Diagnosing the disease is quite challenging due to its diverse presentations.

MATERIALS AND METHODS:

We present three cases of Melioidosis from a tertiary care hospital (AIIMS BHUBANESWAR) in patients aged 31 , 58 and 47 years. Each patient presented with different clinical manifestations . Standard microbiological culture procedures were used to isolate and identify B. Pseudomallei from the samples. Isolates that have been phenotypically identified by culture were confirmed using PCR targeting the type III secretion system gene cluster from both culture and direct sample.

CLINICAL SCENARIO:

Case1 - Presented with fever and headache. Farmer by occupation. No comorbidities. MRI brain confirmed brain abscess. Case 2- Presented with painful swelling over neck region associated with dysphagia. Farmer by occupation. Known case of diabetes mellitus . CECT showed parapharyngeal abscess .which finally progressed to sepsis and patient expired. Case 3- Young male patient , medical professional presented with swelling below the ear with past history of swimming in the sea.

RESULTS:

All three cases were culture positive and both culture and sample were confirmed positive for Burkholderia pseudomallei using PCR.

CONCLUSION:

This case series will help the physician to raise their index of clinical suspicion of Melioidosis even in low risk patients presenting with various findings, thus improving the chances of early appropriate diagnosis and treatment.

PP 27

FUNGAL BALL WITH A TWIST: RARE STREPTOCOCCUS PNEUMONIAE CO INFECTION IN A CHRONIC PULMONARY ASPERGILLOSIS PATIENT

2nd Year

Shalin C Abraham[1], Vinaykumar Hallur[1], Bijayini Behera[1], Diptanu Paul[1], Satyapriya Mohanty[2]

[1]Department of Microbiology, AIIMS Bhubaneswar

[2]Department of CTVS, AIIMS Bhubaneswar

Introduction:

Chronic Pulmonary Aspergillosis (CPA) is a long-term, progressive fungal infection that typically develops in individuals with underlying structural lung diseases. While secondary bacterial infections are known in CPA, co- infection with Streptococcus pneumoniae is infrequently reported and can complicate clinical management. We report a case of CPA with superadded bacterial Infection involving Streptococcus pneumoniae.

Case report:

A 28-year-old male presented with a 9-year history of recurrent episodes of hemoptysis. He also had a lung abscess 11 years back which was treated with antibiotics. HRCT thorax demonstrated a thin-walled cavity in right upper lobe with surrounding fibrotic bands and intracavitary body s/o Aspergilloma. Serological tests showed positive Aspergillus sp IgG/IgM. TB CBNAAT was negative. Patient was diagnosed as a case of CPA, started on Itraconazole and Right upper lobectomy planned. In view of cough exacerbation and fever, sputum culture was sent that yielded S. pneumoniae. Isolate was susceptible to Penicillin, third generation cephalosporins and fluoroquinolones but was resistant to cotrimoxazole, erythromycin and tetracycline. Repeat HRCT Thorax showed signs of active infection like consolidation and tree-in-bud appearance. Surgery was withheld and patient was prescribed Amoxicillin + Clavulanic acid for seven days.

Conclusion:

This case underscores the importance of considering polymicrobial infections, including uncommon bacterial pathogens like S. pneumoniae, in patients with CPA and underlying structural lung damage. Comprehensive microbiological workup, including fungal and bacterial cultures, is essential to guide appropriate therapy and prevent disease progression or complications.

PP 28

SEROTYPE DISTRIBUTION AND ANTIMICROBIAL RESISTANCE OF STREPTOCOCCUS PNEUMONIAE IN A TERTIARY CARE TEACHING HOSPITAL OF ODISHA

2nd Year

Manjori Bhattacharyya[1], Bijayini Behera[1], Ashoka Mahapatra[1]

[1]Department of Microbiology, AIIMS Bhubaneswar

Introduction:

Streptococcus pneumoniae infections constitute a major public health problem in India. Baseline data on the predominant pneumococcal serotype in Indian population is limited to geographic locations. Because of pneumococcal vaccine implementation in the immunization program, a change in epidemiology of pneumococcal serotypes is expected. Hence, serotype surveillance is important to elucidate the circulating predominant serotypes. Like serotype diversity, the antimicrobial resistance profile of pneumococci also demonstrates considerable geographic variation.

Objectives:

In this ongoing prospective study, we examined the prevalent pneumococcal serotypes as well as drug resistance profile in S. pneumoniae.

Materials and Methods:

S. pneumoniae isolates recovered from various clinical samples from 15th June 2024 till 26th June 2025 were included. The preliminary identification was done by bile solubility and optochin susceptibility testing, PCR for cps B gene and AST was performed as per CLSI M10035Ed(2025), Latex coagglutination and Quellung method were used for serotyping.

Results:

Out of 98 isolates, 19 isolates were recovered from Invasive Pneumococcal Disease and 79 isolates were from non-IPD cases. 95% of the individuals had no vaccination history. Overall non-susceptibility to penicillin, ceftriaxone, erythromycin, trimethoprim-sulfamethoxazole, tetracycline, levofloxacin and carbapenems were 9.1%, 6%, 82%, 71%, 68%, 19.5% and 0 respectively. Multidrug resistant (MDR)isolates (resistance to =3 antibiotics) accounted for 54 %. Common serotypes isolated were 19F followed by 13, 6B, 6A, 8 and 15C.

Conclusion:

Most of the identified serotypes are covered by current pneumococcal vaccines, highlighting the pivotal role of pneumococcal vaccine in prevention of IPD. Owing to the majority penicillin non-susceptible pneumococcal isolates being vaccine serotypes, adequate vaccination coverage has the potential to significantly reduce the invasive diseases caused by penicillin non-susceptible S. pneumoniae in Odisha.

PP 29

PYOGENIC INFECTIONS DUE TO FAMILY BACTEROIDACEAE: A CASE-SERIES FROM A TERTIARY-LEVEL HOSPITAL IN EASTERN INDIA

[1]Tanwi Mandal, [1]Srujana Mohanty, [2]Ashutosh Panigrahi , [3]Shantanu Kumar Sahu,

[1]Dept. of Microbiology, [2]Deptt. of haematology and

[3]Dept. of Gen surgery, AIIMS Bhubaneswar, Email id: tanwituli1998@gmail.com

Introduction:

Members of the family Bacteroidaceae include Bacteroides group, Prevotella, Porphyromonas, and Fusobacterium species which are anaerobic gram negative, motile bacilli and predominant members of commensal floral of human intestine. However, they also constitute significant clinical pathogens with an associated mortality of more than 19%, owing to their translocation through the intestinal mucosa into the normally sterile body tissues. Common predisposing factors leading to infection by anaerobes include exposure to a high inoculum of mucosal residents, deficient blood supply and tissue necrosis, that occur in various immune insufficient conditions such as trauma, surgery, colitis, shock, edema, malignancy, foreign body and vascular disease. Additional significant conditions that aid the infectious process include various co-morbid conditions such as diabetes mellitus, splenectomy, immunosuppressive disorders, hypogammaglobinemia, neutropenia, leukaemia, collagen vascular disease and cytotoxic drugs .

Methods and Materials:

We report a series of pyogenic infections due to the Bacteroidaceae family obtained from various clinical specimens consisting of pus aspirates, tissue samples and sterile body samples over a one-year period identified by manual methods as well as by the VITEK-2 system. Antimicrobial susceptibility testing was performed on Mueller-Hinton blood agar by ezyMIC using the CLSI interpretative criteria.

Results:

Bacteroidaceae species were isolated from 4 patients (3 pus and 1 blood) presenting with clinical manifestations of acute necrotising pancreatitis, soft-tissue swelling, splenic abscess and surgery following bowel obstruction. All were male adult patients with age ranging from 24-79 years. A co-morbid condition was observed in 3 patients. Organism profile consisted of Bacteroides ovatus, Prevotella intermedia, Bacteroides fragilis, and B. stercoris. All isolates were susceptible to metronidazole and beta-lactam combination agents.

Conclusion:

The present case-series will contribute to knowledge about the current spectrum of anaerobes responsible for clinical infections and their antimicrobial susceptibility profile, which will help in better management of anaerobic infections, specially due to Bacterodaceae species isolates.

PP 30

PERSISTENT ISOLATION OF ACHROMOBACTER XYLOSOXIDANS FROM SPUTUM IN A PAEDIATRIC PATIENT WITH CYSTIC FIBROSIS: CASE REPORT AND LITERATURE REVIEW

Ashok V [1], Bijayini Behera[1], Krishna Mohan Gulla[2]

[1]Department of Microbiology, [2]Department of Paediatrics, All India Institute of Medical Sciences, Bhubaneswar, Email: ashokvelumani@gmail.com

Introduction:

The microbiology of sputum in cystic fibrosis (CF) is complex, and microbial colonisation and chronic infection lead to a decline in lung function. Colonisation/infection with S.aureus, H.influenzae, P.aeruginosa, B.cepacia complex is common in CF patients. Achromobacter spp, particularly A.xylosoxidans, are emerging pathogens in CF. We review the case of a paediatric CF with persistent isolation of A.xylosoxidans from sputum.

Case Report:

A 17-year-old girl who is diagnosed as CF at 1 year of age, presented with chest pain, cough, fast and noisy breathing for 2 days. O/E, she was malnourished, tachycardic, tachypneic and hypoxemic with SPO2 of 56% in room air. She is a known chronic carrier of P.aeruginosa and diagnosed to have CF related Diabetes Mellitus for which she is started on Insulin therapy. Sputum culture on admission revealed growth of pan-drug resistant A.xylosoxidans (resistant to meropenem, imipenem, piperacillin-tazobactam, trimethoprim-sulfamethoxazole, ceftazidime, ciprofloxacin levofloxacin, and minocycline) based on the CLSI M45 tentative breakpoints. She was treated with broad-spectrum anti-pseudomonal and MRSA coverage [Cefoperazone-Sulbactam, Amikacin, Piptaz, Teicoplanin, Levofloxacin]. A.xylosoxidans was isolated from sputum three times. She had multiple hospitalisations with pulmonary exacerbations since 1 year of age with last admission being two years prior to the current admission when sputum culture had revealed the presence of P.aeruginosa and A.xylosoxidans. and was successfully treated with Meropenem and Cotrimoxazole, with clinical cure. However, the present isolate of A.xylosoxidans was pan-drug resistant and difficult to treat.

Conclusion:

Chronic A.xylosoxidans infection is reported in 5-10% of CF patients from countries with established CF registries. There are reports of rapid deterioration of lung function in paediatric patients after acquisition of A. xylosoxidans with no other obvious trigger. It also highlights many areas of uncertainty in clinical management. Future research studies should be directed towards addressing these uncertainties to improve outcomes for patients.

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UNUSUAL PATHOGEN IN A VULNERABLE HOST: AEROMONAS SALMONICIDA BACTEREMIA IN INFANT WITH B-ALL

Jagannath Sridharan[1], Sonali Padhy[1], Ashoka Mahapatra[1], Debasish Sahoo[2]

[1]Department of Microbiology, AIIMS Bhubaneswar

[2]Department of Medical Oncology, AIIMS Bhubaneswar

Introduction:

Aeromonas salmonicida (A. salmonicida), primarily a fish pathogen causing furunculosis and septicemia, rarely infects humans due to its poor growth at 37°C. However, it can act as an opportunistic pathogen, causing endocarditis and systemic infections. Although typically associated with salmonids, its isolation from human blood with clinical symptoms warrants attention. Advances in diagnostics allow for species-level identification, and prompt antibiotic therapy ensures favorable outcomes. We report a rare case of A. salmonicida bacteremia in a pediatric patient with B-cell acute lymphoblastic leukemia (ALL).

Objectives:

• Highlight a rare human infection • Emphasize the role of automated identification methods • Stress the importance of prompt, targeted therapy.

Materials and Methods:

A BACTEC-positive blood culture bottle showed Gram-negative bacilli on Gram stain. Subculture on blood agar and MacConkey agar revealed nonhemolytic and nonlactose fermenting pigmented colonies, respectively. Biochemical tests suggested Aeromonas species: oxidase positive, nonmotile, K/A reaction on TSI, negative for indole, H_2S, ornithine decarboxylase, and arginine dihydrolase. Vitek2 compact system identified the organism as A. salmonicida. Antimicrobial susceptibility (Kirby-Bauer, CLSI M45) showed sensitivity to amikacin, piperacillin-tazobactam, cotrimoxazole, meropenem, and imipenem; resistance to ceftriaxone and ciprofloxacin.

Results:

A 2-month-old female with B-cell ALL, on consolidation chemotherapy, presented with fever, cough, petechiae, and gum bleeding. She had prior cerebral venous sinus thrombosis, treated with enoxaparin. Labs showed pancytopenia (Hb 8.1, TLC 0.32×10^3, platelets 7000). She received empirical IV ceftriaxone, supportive care, and GM-CSF. Despite improvement, fever persisted. Blood culture results led to escalation to IV meropenem and amikacin, after which she improved and was discharged following 4 afebrile days.

Conclusion:

To our knowledge, A. salmonicida bacteremia has not been reported in infants under 3 months with leukemia. This case underscores the need to consider rare pathogens in febrile immunocompromised children. Accurate diagnosis and early targeted therapy can significantly improve outcomes.

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UNCOMMON BUT CONCERNING: A CASE SERIES OF CHRYSEOBACTERIUM INDOLOGENES ASSOCIATED WITH VENTILATOR-ASSOCIATED PNEUMONIA IN ICU PATIENTS

Ansupa Mishra, Bijayini Behera, Chandramani Sahoo

INTRODUCTION:

Chryseobacterium indologenes is an emerging, non-fermenting, Gram-negative bacillus that is increasingly isolated from patients with pneumonia, bacteremia, and artificial shunt infections, particularly those with long-term indwelling devices, immunocompromised status, or critical illness. Though rare, its role in VAP presents diagnostic and therapeutic challenges due to intrinsic multidrug resistance and limited clinical familiarity.

OBJECTIVES:

To describe the clinical features, antibiotic resistance patterns, and outcomes of VAP caused by C. indologenes in ICU patients.

METHODS:

We present a case series of four ICU patients over five months who developed VAP with C. indologenes. Isolates from clinical specimens were confirmed using the VITEK 2 system, with susceptibility testing per CLSI guidelines. Environmental cultures, including bronchoscopy and Cidex disinfectant solutions, were negative for C. indologenes, suggesting infection was not due to contamination.

RESULTS – CASE DETAILS:

Case 1: 59-year-old female with comorbidities and prolonged ventilation from MICU, developed polymicrobial sepsis. C. indologenes was repeatedly isolated from tracheostomy secretions. Despite targeted therapy, she died after 35 days due to sepsis and MODS.

Case 2: 59-year-old male developed VAP during a prolonged MICU stay. C. indologenes was isolated from tracheal aspirates. He died after 49 days due to sepsis and MODS.

Case 3: 56-year-old male with relapsed myeloma on mechanical ventilation from hematoncology ICU had C. indologenes isolated from ET secretions, succumbed to multiple infections after 63 days.

Case 4: A 2-year-old male with ARDS (post-VV ECMO), pneumothorax, and AKI developed C.indologenes VAP in PICU. Treated with minocycline, he improved and was discharged after 61 days.

CONCLUSION:

C. indologenes is a rare but emerging VAP pathogen in critically ill patients. While some improve with targeted therapy, others face poor outcomes. Early recognition and appropriate treatment are crucial for improving prognosis.

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DIFFICULT-TO-TREAT RESISTANT GRAM-NEGATIVE BLOOD STREAM INFECTIONS: ANALYSIS OF PREVALENCE AND OUTCOME OF RESISTANCE TO ALL FIRST-LINE AGENTS

Dr Shruti Patel

1st Year, KIMS

Introduction:

Gram-negative bacteria (GNB) account for 34–44% of bloodstream infections (BSI) in adults, and the incidence varies depending on geographic location [1]. The increased incidence of antibiotic resistance among GNBs is a serious concern worldwide. The mortality from gram-negative bacterial bloodstream infections (GNBSI) was found to be growing with the decrease in the number of susceptible first-line antibiotics [2]. Various phenotypic resistance patterns like carbapenem-resistance (CR), extended-spectrum cephalosporin-resistance (ESCR), fluoroquinolone resistance and multi-drug resistance (MDR) have been defined [3]. Kadri et al. proposed Difficult-to-Treat Resistance (DTR), a novel classification of antibiotic phenotypic resistance pattern [4]. It is defined as intermediate or resistant to all antibiotics in ß-lactam (including carbapenem) and fluoroquinolone categories. These drugs are highly effective and less toxic first-line antibiotics against gram-negative bacterial infections. DTR bacteria pose a challenge in treatment as we are left with only reserve drugs like colistin, polymyxin-B, tigecycline and aminoglycosides, which are more toxic and less effective as single agents. Thus, DTR classification is more clinically relevant than other resistance phenotypes [5].

Aim and objective :

1. To know the prevalence of DTR among Gram Negative bloodstream infections (GNBSIs). 2. To estimate the effect of nonsusceptibility to first-line agents on in-hospital mortality rates.

Material and Method:

This is a retrospective study of one year and the data was collected from Microbiology culture records. The study included the patients of all ages and both sexes with gram-negative bacterial bloodstream infections (GNBSI). Blood cultures with the growth of contaminants and/or single positive culture taken from the femoral site were excluded. Incidences of DTR infections and outcomes in the form of mortality were analyzed.

Result:

Out of 201 patients with GNBSI, 49.25% (99/201) were due to DTR GNBSI. The most common DTR GNBSI isolates were Klebsiella pneumoniae 41.41% (41/99), followed by Acinetobacter baumannii 26.26% (26/99) and E. coli 14.14% (14/99). Male to Female ratio among DTR GNBSI was found to be 2:1 and the mortality rate among the DTR GNBSI (50%) was more as compared to NON DTR GNBSI (40%). Multivariate analysis found that Hospital-acquired infections, ICU admission and mechanical ventilation were independent risk factors for DTR GNBSI.

Conclusion:

Antibiotic Stewardship practices and development of novel antibiotics will be helpful to fight against these infections.

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2	2008	Dr Saraju Bihari Pati	Dr Nagen Kumar Debata	Dr. Soumyakanta Sahoo
3	2009	Dr Kamini Mohan Baisakh	Dr Nagen Kumar Debata	Dr. Soumyakanta Sahoo
4	2010	Dr Nagen Kumar Debata	Dr Nirupama Chayani	Dr. Soumyakanta Sahoo
5	2011	Dr Kanaklata Pattnaik	Dr Nirupama Chayani	Dr. Soumyakanta Sahoo
6	2012	Dr Jyoti Prakash Mitra	Dr Nirupama Chayani	Dr. Soumyakanta Sahoo
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5.	Kalinga Institute of Medical Sciences, Bhubaneswar	Navya Verma
6.	Institute of Medical Sciences and Sum Hospital, Bhubaneswar	Mrunmayee Panda
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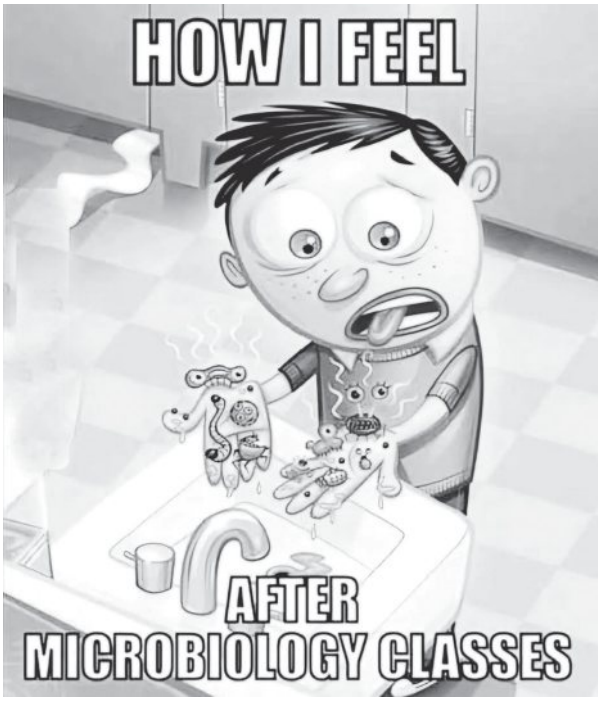
13.	Shri Jagannath Medical College & Hospital, Puri	Abinash Behera
14.	Dharanidhar Medical College & Hospital, Kendujhar	Sasmita Sahoo
15.	Government Medical College & Hospital, Sundargarh	Astha Agarwal



CHRONOLOGY OF BEST PAPER IN ORAL PRESENTATION

YEAR	TITLE OF PAPERS FOR ORAL PRESENTATION	NAME
2007	Study of *Chlamydia trachomatis* and *Mycoplasma spp.* in PID	Dr Sarita Mohapatra
2008	Nocardia brain abscess mimicking brain tumor – A case report	Dr Suneeta Sahu
2009	Prevalence of parasites causing chronic diarrhea in HIV sero-positive patients in & around southern Odisha	Dr Minakshi Gupta
2010	*Mycobacterium cheloni* complicating a case of Hidradenitis suppurativa-A report	Dr Nibedita Patra
2011	Wound infection by *Clostridium tyrobutyricum* Mycoses in PLHA cases : A correlation to CD4 Count	Dr Suneeta Sahu Dr Rani Sahu
2012	Role of MDR Pathogen in VAP in a tertiary care hospital	Dr Somi Patro
2013	Study of Biofilm production in *Escherichia coli* causing UTI its correlation with the Antimicrobial resistance.	Dr Debabrata Dash
2014	Correlation of HPV infection with Bacterial vaginosis in cases & controls	Dr Priyadarshini Patro
2015	Microbiological spectrum, biofilm formation and antibiotic sensitivity of conjunctival flora in chronic dacrocystitis	Dr Sanchita Mishra
2016	A study on the microbial profile of lower respiratory tract infection in HIV sero-positive cases	Dr Agniva Majumdar
2017	Microbial profile of Keratoconjunctivitis in a tertiary care hospital	Dr Sumanta Sahu
2018	Prevalence of fungal infection in patients of Pulmonary tuberculosis in Southern Odisha	Dr Abhisek Padhi
2019	Evaluation of rapid Polymyxin NP test for detection of colistin resistance in clinical isolates of Carbapenem Resistant Enterobacteriaceae.	Dr Punyatoya Kar
2023	1st) Possession of virulence genotypes in multidrug resistant uropathogenic *Escherichia Coli* among inpatients and outpatients from a tertiary care hospital	Dr Subhrasmita Jena
	2nd) Emergence of *Entamoeba moshkovskii* as a significant cause of amoebic liver abscess in Eastern India	Dr P Harishni
	3rd) A Comparative Study on Fosfomycin MIC In *Escherichia Coli* and *Enterococcus faecalis* Isolates from Uncomplicated and Complicated UTI.	Dr Shubhada Priyadarshini Parida
2024	1st) Bacteriological profile of Ventilator Associated Pneumonia (VAP) among stroke patients in a tertiary care hospital	Dr. Smrutisree Mohapatra
	2nd) Detection of Colistin Susceptibilty of Carbapenem Resistant Gram Negative Enterobacterales From Different Clinical Samples in a Tertiary Care Hospital	Dr. Sonalika Swain
	3rd) Association of Leptospirosis With Occurance of CKD of Uncertain Aetiology (CKDU) Among Patients Attending a Tertiary Care Hospital	Dr Seema Rani Sahoo
	BEST FREE PAPER	
	Prevalence of Viral Pathogens and their Clinical Correlation Among Patients with Acute Respiratory Illness in a Tertiary Care Hospital	Dr Dipsa Routray

CHRONOLOGY OF BEST PAPER IN POSTER PRESENTATION

YEAR	NAME	TITLE OF PAPERS FOR POSTER PRESENTATION
2011	Dr Shreekant Tiwari	*Strongyloides stercoralis* hyperinfection syndrome in immunocompetent patient: A case report
2012	Dr Rani Sahu	Isolated case of Submandibular lymphadenopathy due to *Histoplasma capsulatum* - A case report
2013	Dr Anubhuti	Isolation of Acinetobacter with respect to Antibiogram
	Dr Priyadarshini Patro	Chronic Osteomyelitis due to Streptococcus suis- A rare Case report
2014	Dr Tanushree Ghosh	Correlation between bacteriuria and pyuria in the diagnosis of UTI
2015	Dr Harsh Prasoon	Chromoblastomycosis caused by *Cladophialophora carrioni*
	Dr Sudipti Sahu	Nocardiosis caused by *Nocardia farcinia*: A rare case report
2016	Dr Subhalaxmi Sahoo	Microbiological study of reproductive tract infections in women of child bearing age group
2017	Dr Surya Rashmi Sahu	Genetic analysis of prevalent of ESBL strains in IMS & SUM Hospital
2018	Dr Leesa Mohanty	Disseminated Cutaneous Rhinosporidosis
2019	Dr Prasanth P	Melioidosis: Spectrum of skin and soft tissue manifestation , a case series from Odisha
	Dr Pratikshya Behera (1st)	Epidemiology and in vitro activity of ceftazidime-avibactam against multidrug-resistant isolates of Enterobacterales and *Pseudomonas aeruginosa* in a tertiary care hospital, Eastern Odisha.
2023	Dr Dipsa Routray (2nd)	Case Series of Mucormycosis in Immunocompromised Patients
	Dr Seema Rani Sahoo (3rd)	Epidemiological Study of Mycotic Keratitis in a Tertiary Care Hospital in Coastal Odisha
2024	Dr Prajna Nayak	Case Report on Chromoblastomycosis
	Dr Gowri Thampy	*Burkholderia cepacia* infection in a 45 year old female with Aspergilloma - A case report
	Dr. Priyanka Mahapatra	A study on susceptibility of carbapenemase producing Enterobacterales and *Pseudomonas aeruginosa* to Aztreonam and Ceftazidime-Avibactam combination at a tertiary care Hospital

LIFE MEMBERS OF IAMM ODISHA CHAPTER

Sl. No.	Life Membership Number	Name of Life Member	Email	Mob.:
1.	LM/IAMM/ODISHA/1	Dr K. C. Nathsarma		
2.	LM/IAMM/ODISHA /2	Dr Santilata Rath		
3.	LM/IAMM/ODISHA /3	Dr Sunil Ku Mohanty	drskmohanty3@ yahoo.com	
4.	LM/IAMM/ODISHA /4	Dr Suhasini Chawada		
5.	LM/IAMM/ODISHA /5	Dr Jyotiprakash Mitra		9437000238
6.	LM/IAMM/ODISHA /6	Dr Saraju Bihari Pati	saraju_pati@rediffmail.com	9437080687
7.	LM/IAMM/ODISHA /7	Dr Kaminimohan Baisakh	drkmbaisakh@gmail.com	7008591308
8.	LM/IAMM/ODISHA /8	Dr Nagen Kumar Debata	dr.debata@gmail.com	9437306886
9.	LM/IAMM/ODISHA /9	Dr Kanakalata Pattnaik	drkpatnaik@rediffmail.com	9338016026
10.	LM/IAMM/ODISHA /10	Dr Savitri Sharma	savitri@lvpie.org	9989995521
11.	LM/IAMM/ODISHA /11	Dr Sudhir Kumar Ghosh	skghosh.dr@gmail.com	7978850751
12.	LM/IAMM/ODISHA /12	Dr Nirupama Chayani	nirupama.chayani@gmail.com	9437310666
13.	LM/IAMM/ODISHA /13	Dr Banojini Parida	drbanojiniparida@gmail.com	9861090907
14.	LM/IAMM/ODISHA /14	Dr Jagadananda Jena	dr.jjena@gmail.com	9778321044
15.	LM/IAMM/ODISHA /15	Dr Ashok Kumar Praharaj	praharajak@yahoo.co.in	9668495369
16.	LM/IAMM/ODISHA /16	Dr Pritilata Panda	drpreeti@yahoo.com	9437305149
17.	LM/IAMM/ODISHA /17	Dr Sudhir Ranjan Mishra	sudhiranjan.mishra@gmail.com	9437100306
18.	LM/IAMM/ODISHA /18	Dr DiptiPattnaik	drdiptipattnaik@yahoo.com	9438237292
19.	LM/IAMM/ODISHA /19	Dr Baijayantimala Mishra	bm_mishra@hotmail.com	9438884121
20.	LM/IAMM/ODISHA /20	Dr Bandana Mallick	jagatbandan@gmail.com	9937173518
21.	LM/IAMM/ODISHA /21	Dr Supriya Panda	drsupriyapanda@gmail.com	9848429919
22.	LM/IAMM/ODISHA /22	Dr Gitanjali Sarangi	drgitanjalisarangi1208@gmail.com	7978756397
23.	LM/IAMM/ODISHA /23	Dr Padma Das	drdaspadma@gmail.com	8518881728
24.	LM/IAMM/ODISHA /24	Dr Ashoka Mahapatra	meetasoka@yahoo.co.in	9437302030
25.	LM/IAMM/ODISHA /25	Dr Susanta Kumar Sahu	drsusantavss@gmail.com	9040317489
26.	LM/IAMM/ODISHA /26	Dr Suneeta Sahu	sahumicro@yahoo.co.in	8093060047
27.	LM/IAMM/ODISHA /27	Dr MuktikeshDash	mukti_mic@yahoo.com	9861046640
28.	LM/IAMM/ODISHA /28	Dr Bhabani Patnaik	patnaikbhabani73@gmail.com	7205841893
29.	LM/IAMM/ODISHA /29	Dr Bichitrananda Swain	bswainprabhu@gmail.com	9937330930
30.	LM/IAMM/ODISHA /30	Dr ShreekantTiwari	drshreekant@rediffmail.com	9437151263
31.	LM/IAMM/ODISHA /31	Dr Rajesh Lenka	rajeshlenka@soa.ac.in	7381026300
32.	LM/IAMM/ODISHA /32	Dr Kundan Kumar Sahu	drkundansahu@gmail.com	9437383025
33.	LM/IAMM/ODISHA /33	Dr Rajashree Panigrahy	drrajashreep@gmail.com	8249005970
34.	LM/IAMM/ODISHA /34	Dr Surya Narayan Mishra	surya.mishra@kims.ac.in	8093401845
35.	LM/IAMM/ODISHA /35	Dr SanghamitraPadhi	padhisanghamitra@yahoo.in	9437260300
36.	LM/IAMM/ODISHA /36	Dr Sarita Mohapatra	drsarita2005@gmail.com	9810726220
37.	LM/IAMM/ODISHA /37	Dr T Karuna	karunakhadanga@yahoo.co.in	7771033359
38.	LM/IAMM/ODISHA /38	Dr DharitriMohapatra	dr.dharitri@rediffmail.com	9437422018
39.	LM/IAMM/ODISHA /39	Dr Bimoch Projna Paty	bimochpaty@gmail.com	9437320295

40.	LM/IAMM/ODISHA /40	Dr Rakesh Kumar Panda	drrakesh_76@rediffmail.com	9437310147
41.	LM/IAMM/ODISHA /41	Dr Dibya Prasana Mohanty	drdibyaprasana@gmail.com	8895731424
42.	LM/IAMM/ODISHA /42	Dr Sagarika Dhal	dhalsagarika@gmail.com	9861083434
43.	LM/IAMM/ODISHA /43	Dr Snigdharani Choudhury	snigdharanichoudhury@yahoo.co.in	9861230003
44.	LM/IAMM/ODISHA /44	Dr Lopamudra Das	lopamudradasdr@rediffmail.com	8895061910
45.	LM/IAMM/ODISHA /45	Dr Indrani Mohanty	indranimohanty@yahoo.co.in	8249766580
46.	LM/IAMM/ODISHA /46	Dr. Srujana Mohanty,	srujana_micro@yahoo.co.in	9438884124
47.	LM/IAMM/ODISHA /47	Dr. Bijayini Behera	drbinny2004@gmail.com	7750847562
48.	LM/IAMM/ODISHA /48	Dr Soumya Nayak	somumya1.nayak@ kims.ac.in	7008303340
49.	LM/IAMM/ODISHA /49	Dr Gautam Pattnaik	dr.gautam.patnaik@gmail.com	9438591160
50.	LM/IAMM/ODISHA /50	Dr Preet Priyadarshini	preet.priyadarshini@gmail.com	8763607140
51.	LM/IAMM/ODISHA /51	Dr Sutapa Rath	sutapa.rath@yahoo.com	9437778205
52	LM/IAMM/ODISHA /52	Dr Monalisa Mohanty	monalisamohanty049@gmail.com	9861506494
53.	LM/IAMM/ODISHA /53	Dr Rani Sahu	drranisahu@gmail.com	8339903727
54	LM/IAMM/ODISHA /54	Dr Swetalona Pattnaik	drsweta06@gmail.com	8895660309
55.	LM/IAMM/ODISHA /55	Dr Amruta Kar	amrutakar27@gmail.com	9438461668
56	LM/IAMM/ODISHA /56	Dr Mamta Bhatt	drmamtabhatt008@gmail.com	9861180262
57	LM/IAMM/ODISHA /57	Dr Sarita Nayak	drsaritanayak007@yahoo.com	9078255042
58	LM/IAMM/ODISHA /58	Dr Suchitra Mishra	dr.suchitra.mishra@gmail.com	8895468015
59	LM/IAMM/ODISHA /59	Dr Sarvodaya Tripathy	sarvo_trip@yahoo.co.in	9178085818
60	LM/IAMM/ODISHA /60	Dr Sakuntala Mundary	sakuntalamundary@gmail.com	9686603200
61	LM/IAMM/ODISHA /61	Dr Subhalaxmi Sahoo	dillipsahoo561988@gmail.com	8280131324
62.	LM/IAMM/ODISHA /62	Dr Soumya Sibani Sahoo	soumyasibani89@gmail.com	9439254681
63	LM/IAMM/ODISHA /63	Dr Swetalina Jena	drswetalinajena.sj@gmail.com	7606016061
64	LM/IAMM/ODISHA /64	Dr SumantaSahu	sumantasahu7@gmail.com	9861580987
65	LM/IAMM/ODISHA /65	Dr Bibhudutta Rautaraya	drbibhu_75@rediffmail.com	9437088129
66	LM/IAMM/ODISHA /66	Dr SoumyakantaSahoo	sk.soumya@gmail.com	9937941204
67	LM/IAMM/ODISHA /67	Dr Somi Patro	somipatro@gmail.com	9437308566
68	LM/IAMM/ODISHA /68	Dr Jyotirmayee Turuk	drjyotirmayeeturuk@gmail.com	7653915589
69	LM/IAMM/ODISHA /69	Dr Sonalika Rath	rath.sonalika@gmail.com	9583564058
70	LM/IAMM/ODISHA /70	Dr Paresh Nath Mohanty	pareshmohanty67@gmail.com	9238579352
71	LM/IAMM/ODISHA /71	Dr Geetarani Purohit	geeta198626@gmail.com	9868429847
72	LM/IAMM/ODISHA /72	Dr Sasmita Khatua	143saishreyansh@gmail.com	9439662499
73	LM/IAMM/ODISHA /73	Dr Kumudini Panigrahi	kumudini.panigarahi@kims.ac.in	9438116539
74	LM/IAMM/ODISHA /74	Dr Nipa Singh	nipa.singh@kims.ac.in	9437405803
75	LM/IAMM/ODISHA /75	Dr Subhra Snigdha Panda	subhra.panda@kims.ac.in	7381033680
76	LM/IAMM/ODISHA /76	Dr Smrutilata Sahoo	smrutilata.sahoo@kims.ac.in	9439525243
77	LM/IAMM/ODISHA /77	Dr Nirmala Podder	nirmala.poddar@kims.ac.in	7978806167
78	LM/IAMM/ODISHA /78	Dr Manisa Sahu	nisit1978@gmail.com	8249417036
79	LM/IAMM/ODISHA /79	Dr Sarita Otta	saritaotta@gmail.com	9438529628
80	LM/IAMM/ODISHA /80	Dr Sunita Kabi	sunitakabi@gmail.com	9861377336
81	LM/IAMM/ODISHA /81	Dr Priyadarshini Bhoi	drpdbhoi@gmail.com	
82	LM/IAMM/ODISHA /82	Dr Subasini Majhi	subasinimajhi@gmail.com	9437262442

83	LM/IAMM/ODISHA /83	Dr Manish Kumar Rout	simply2manish@gmail.com	9776991422
84	LM/IAMM/ODISHA /84	Dr SusmitaKumari Sahu	susmitakumarisahu@gmail.com	9439337909
85	LM/IAMM/ODISHA /85	Dr M V Narasimham	mvn_dr9@reiffmail.com	9437166925
86	LM/IAMM/ODISHA /86	Dr Mandira Sarkar	xxxxxxxxxx	
87	LM/IAMM/ODISHA /87	Dr Baidyanath Mishra	xxxxxxxxx	
88	LM/IAMM/ODISHA /88	Dr Bharat Patel	drbharat2010@gmail.com	9938032122
89	LM/IAMM/ODISHA /89	Dr Debabrata Dash	dashdeb30@gmail.com	8895628466
90	LM/IAMM/ODISHA /90	Dr Priyadarshini Patro	priyadarshini.patro@gmail.com	9438824315
91	LM/IAMM/ODISHA /91	Dr Pragnya Paramita Jena	drpragnyajena@gmail.com	9643272190
92	LM/IAMM/ODISHA /92	Dr Preety Mishra	preetymishra108@gmail.com	7539072811
93	LM/IAMM/ODISHA /93	Dr Kalpana Mund	Kalpass3@rediffmail.com	
94	LM/IAMM/ODISHA /94	Dr Monalisa Panigrahi	mplisu@gmail.com	8763169649
95	LM/IAMM/ODISHA /95	Dr Neha Samal	nehasml52@gmail.com	7077979886
96	LM/IAMM/ODISHA /96	Dr Purabi Baral	drpurabibaral@gmail.com	9871540210
97	LM/IAMM/ODISHA /97	Dr Satish Kumar Dalai	skdalai2010@gmail.com	8763459155
98	LM/IAMM/ODISHA /98	Dr Jyotirmayee Panda	Jyotirmayee1705@gmail.com	9439958263
99	LM/IAMM/ODISHA /99	Dr Sonam Silpa Moharana	smoharan@gmail.com	9438328407
100	LM/IAMM/ODISHA /100	Dr Leesa Mohanty	leesaat111@gmail.com	8763333141
101	LM/IAMM/ODISHA /101	Dr M Sunita Debi	debi19sunita77@gmail.com	9438506350
102	LM/IAMM/ODISHA /102	Dr Priyadarsani Khandayatray	dr.p.khandayatray@gmail.com	8249185315
103	LM/IAMM/ODISHA /103	Dr Jharana Mahanta	jharna.gulu@gmail.com	8763524189
104	LM/IAMM/ODISHA /104	Dr Namita Das	namitadastrisa@gmail.com	9439306150
105	LM/IAMM/ODISHA /105	Dr Sivasankar Das	bubun21@gmail.com	
106	LM/IAMM/ODISHA /106	Dr Sudhansu Priyadarsini Biswal	devidasisucarita23@gmail.com	8117881712
107	LM/IAMM/ODISHA /107	Dr Satyabrata Thakur	satyabrata.thakur@gmail.com	8895152060
108	LM/IAMM/ODISHA /108	Dr BasantiKumariPathi	pathibasanti@gmail.com	7735285610
109	LM/IAMM/ODISHA /109	Dr LalliSmruti Sahu	drlssahu@gmail.com	9439010105
110	LM/IAMM/ODISHA /110	Dr Madhumita Swain	dr.madhumita96@gmail.com	9861335970
111	LM/IAMM/ODISHA /111	Dr ChandraSekhar Panda	chandra.panda1@gmail.com	9937285394
112	LM/IAMM/ODISHA /112	Dr Lipika Jena	lipikajena.jena07@gmail.com	
113	LM/IAMM/ODISHA /113	Dr Amresh Pati	amresh.pati@gmail.com	8144781067
114	LM/IAMM/ODISHA /114	Dr Swati Mishra	swatimishra2007id@gmail.com	8249313990
115	LM/IAMM/ODISHA /115	Dr Lopamudra	lopamudra.bishoyi@gmail.com	9437315585
116	LM/IAMM/ODISHA /116	Dr Shehnaz Firdaus	shehnazzz86@yahoo.com	9654982184
117	LM/IAMM/ODISHA /117	Dr Kunalsen Jagatdeo	kunal.supersaiyan@gmail.com	9178692665
118	LM/IAMM/ODISHA /118	Dr Sasmita Hotta	sasmitahotta@gmail.com	9778330489

119	LM/IAMM/ODISHA /119	Dr Punyatoya Kar	rinu.mkcg@gmail.com	8763867937
120	LM/IAMM/ODISHA /120	Dr Arpita Mishra	dr.arpitajh18@gmail.com	8763179558
121	LM/IAMM/ODISHA /121	Dr Akash Panigrahi	akashpanigrahi007@gmail.com	9124472290
122	LM/IAMM/ODISHA /122	Dr Sarita Kar	saritakar_r81@rediffmail.com	7008993823
123	LM/IAMM/ODISHA /123	Dr Debadatta Bhanjadeo	debadatta.bbsr@gmail.com	9438296857
124	LM/IAMM/ODISHA /124	Dr Vinaykumar Hallur	vinay118@gmail.com	9041018625
125	LM/IAMM/ODISHA /125	Dr Prashant P	dr.prashanth.pdk@gmail.com	
126	LM/IAMMODISHA/126	Dr Samir Kumar Sarangi	samirsarangi1990@gmail.com	9439417357
127	LMI/IAMM/ODISHA/127	Dr Rajesh Kumar Sahu	drrajks38@gmail.com	9337788777
128	LM/IAMM/ODISHA/128	Dr Pradipta Kishore Sahoo	drpksahoo2012@gmail.com	7205603702
129	LM/IAMM/ODISHA/129	Dr Swaranika Mandal	swaranikamandal@gmail.com	90406 97666
130	LM/IAMM/ODISHA/130	Dr Soumyashree Mohapatra	Soumyashreemohapatra1@gmail.com	93376 32688
131	LM/IAMM/ODISHA/131	Dr Sapnarani Behera	sapnabehera91@gmail.com	70084 32592
132	LM/IAMM/ODISHA/132	Dr Manaswini Das	manaswinidas2015@gmail.com	82806 62676
133	LM/IAMM/ODISHA/133	Dr Sajid Khan	sajid100210khan@gmail.com	80182 65767
134	LM/IAMM/ODISHA/134	Dr Roshan Kanheya Lenka	roshan.exam11@gmail.com	80939 97992
135	LM/IAMM/ODISHA/135	Dr. Ajit Kumar Nayak	ajit.nayak38@gmail.com	97775 67597
136	LM/IAMM/ODISHA/136	Dr Sarita Kumari Sahu	sahu.sarita33@gmail.com	70080 68700
137	LM/IAMM/ODISHA/137	Dr. Soumya Shree Ghosh	soumyashreeghosh.lipi@gmail.com	93482 25537
138	LM/IAMM/ODISHA/138	Dr Abhipsa Mohapatra	abhipsamohapatra3@gmail.com	8895765564
139	LM/IAMM/ODISHA/139	Dr Dipankar Pattnaik	dipankarpattnaik8@gmail.com	91793 12450
140	LM/IAMM/ODISHA/140	Dr. Indu Biswal	drindubiswal@gmail.com	9650206089
141	LM/IAMM/ODISHA/141	Dr Sumitra Das	sumitradas95@gmail.com	7735295048
142	LM/IAMM/ODISHA/142	Dr Sibashree Priyadarshnee Behera	beherasibashree60@gmail.com	8249440452
143	LM/IAMM/ODISHA/143	Dr Parthasarathi Satpathi	pssatpathi@gmail.com	9474679186
144	LM/IAMM/ODISHA/144	Dr Devasmita Satpathy	devasmita1976@gmail.com	9938606064
145	LM/IAMM/ODISHA/145	Dr Sumesh Kumar Dash	dr.sumeshkumardash@gmail.com	9861032715
146	LM/IAMM/ODISHA/146	Dr Pratikshya Mahapatra	prati.maha92@gmail.com	7978137646
147	LM/IAMM/ODISHA/147	Dr Annapurna Parida	anniparida@gmail.com	9450285309
148	LM/IAMM/ODISHA/148	Dr Subhasmita Das	smita.mita.das@gmail.com	7982691370
149	LM/IAMM/ODISHA/149	Dr Sudipta Kumar Ram	sudiptaram00@gmail.com	6371594699
150	LM/IAMM/ODISHA/150	Dr Anindita Routray	loraanindita@gmail.com	9438707200
151	LM/IAMM/ODISHA/151	Dr Sigma Satapathy	sigmasatapathy1992@gmail.com	7735515785
152	LM/IAMM/ODISHA/152	Dr Priyadarshini Debata	priyadebata4@gmail.com	9439584763
153	LM/IAMM/ODISHA/153	Dr Aruna Rani Behera	arunaapril11@gmail.com	9437708257
154	LM/IAMM/ODISHA/154	Dr Kirtika Panda	kirtika.panda@gmail.com	8178955112

155	LM/IAMM/ODISHA/155	Dr Roshni Dandapat	drroshnirose92@gmail.com	7077703385
156	LM/IAMM/ODISHA/156	Dr Neha Patnaik	nehapatnaik90@gmail.com	8249252131
157	LM/IAMM/ODISHA/157	Dr Monalisa Subudhi	ms.sum2@soa.ac.in	8249345390
158	LM/IAMM/ODISHA/158	Dr Jasoda Majhi	microbiologysjmch@gmail.com	8895954422
159	LM/IAMM/ODISHA/159	Dr Debasish Sahoo	debasishbbsr2@gmail.com	9776215033
160	LM/IAMM/ODISHA/160	Dr Sudipti Sahu	drdrdarjee@gmail.com	9776255592
161	LM/IAMM/ODISHA/161	Dr Divya Undrakonda	divya.undrakonda@gmail.com	7656942861
162	LM/IAMM/ODISHA/162	Dr Suryarashmi Sahoo	dr.srs89@gmail.com	9438674285
163	LM/IAMM/ODISHA/163	Dr Ansuman Dash	ansumandash1987@gmail.com	9777999089
164	LM/IAMM/ODISHA/164	Dr Shaik Taheruddin	taher.pammie@gmail.com	8895332754
165	LM/IAMM/ODISHA/165	Dr Pramila Minz	pramila9581@gmail.com	9040666717
166	LM/IAMM/ODISHA/166	Dr Nitin Mohan	nitinmohan@gmail.com	9966973434
167	LM/IAMM/ODISHA/167	Dr Seema Mishra	seemam14@gmail.com	7008604169
168	LM/IAMM/ODISHA/168	Dr Anato K Swu	anaboswu50@gmail.com	8414814112
169	LM/IAMM/ODISHA/169	Dr SonaliPadhy	doc.sonali28@gmail.com	9583156443
170	LM/IAMM/ODISHA/170	Dr Nidhi Prasad	prasadnidhi2021@gmail.com	9437500700
171	LM/IAMM/ODISHA/171	Dr Nikunja Kumar Das	nikunjdas3085@gmail.com	9881923603
172	LM/IAMM/ODISHA/172	Dr Satya Ram Satapathy	butu2butu@gmail.com	7978639096
173	LM/IAMM/ODISHA/173	Dr Mukesh Kumar Sahoo	mksahoo701@gmail.com	9439899993
174	LM/IAMM/ODISHA/174	Dr Debasis Dash	debasisjitu14@gmail.com	9338302625
175	LM/IAMM/ODISHA/175	Dr Alok Kumar Patel	alokkumarpatel38@gmail.com	7008892256
176	LM/IAMM/ODISHA/176	Dr Subhashree Mohapatra	dr.subhashreemohapatra@gmail.com	9873389969
177	LM/IAMM/ODISHA/177	Dr Lipika Pradhan	lipika.pradhan88@gmail.com	7978044851
178	LM/IAMM/ODISHA/178	Dr Himansu Sekhar Behera	himansubt@gmail.com	8851165153
179	LM/IAMM/ODISHA/179	Dr Lalmohan Mishra	lmishra28@gmail.com	9238461665
180	LM/IAMM/ODISHA/180	Dr Monalisa Sahoo	monalisasahoo08@gmail.com	8895030663
181	LM/IAMM/ODISHA/181	Dr Debabrata Barik	dr.9705@gmail.com	8456050717
182	LM/IAMM/ODISHA/182	Dr Bansuribala Sahoo	b.b.sahoo.bs	9315506843
183	LM/IAMM/ODISHA/183	Dr Uday Hembram	drudayhembram@gmail.com	9439908600
184	LM/IAMM/ODISHA/184	Dr Rumita Dey	drrumita224@gmail.com	9766221024
185	LM/IAMM/ODISHA/185	Dr Ankita Roy	ankita.roy2@kims.ac.in	7008394839
186	LM/IAMM/ODISHA/186	Dr Aakash Kumar	aahkash15jan@gmail.com	797860 9902
187	LM/IAMM/ODISHA/187	Dr Prashant Kumar Biswal	dr.biswal83@gmail.com	8249319751

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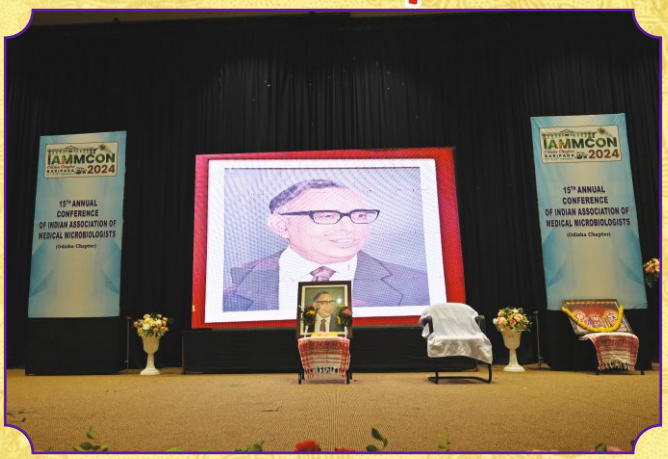

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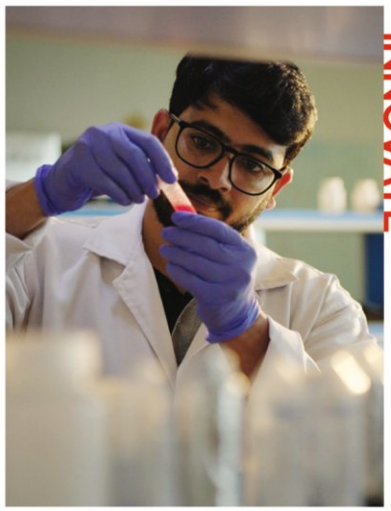

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