Souvenir

IAMMCON
Odisha Chapter
BARIPADA
27th & 28th September
2024

15th Annual Conference
of
Indian Association of Medical Microbiologists
Odisha Chapter

Department of Microbiology,
PRM Medical College & Hospital, Baripada
27th & 28th September, 2024

ରଘୁବର ଦାସ
ରାଜ୍ୟପାଳ, ଓଡ଼ିଶା
रघुवर दास
राज्यपाल, ओड़िशा
Raghubar Das
Governor, Odisha

सत्यमेव जयते

ରାଜ ଭବନ
ଭୁବନେଶ୍ୱର - ୭୫୧ ୦୦୮
राज भवन
भुबेनश्वर - ७५१००८
RAJ BHAVAN
BHUBANESWAR - 751 008

September, 12 2024

MESSAGE

I am glad to know that IAMMCON-OC: 2024, the 15th Annual Conference of Indian Association of Medical Microbiologsts (IAMM), Odisha Chapter is to be organised at Pandit Raghunath Murmu Medical College & Hospital, Baripada on September 27-28, 2024. A souvenir with scientific and informative articles is also being brought out to mark the occasion.

Over the last few years many infectious diseases has emerged and the microorganisms have changed tremendously. We have been experiencing many outbreaks of such diseases. Emergence of Monkey Pox is a new addition to the list. Medical Microbiologists have played a pivotal role in diagnosis, prevention and control of these infectious diseases. It is highly necessary for more Medical Microbiologists to be involved in R&D in development of diagnostic tools to detect new microbes.

I convey my good wishes to the participating Medical Microbiologists of the State. I hope that this conference would extensively debate pertinent issues to help Microbiologists towards new breakthroughs in the service of mankind in future. I wish the conference and publication all success.

(Raghubar Das)

Tel.: 91-674-2536111/2536222, Fax : 91-674-2536582, E-mail : govodisha@nic.in, Website: www.rajbhavanodisha.gov.in

DR. MUKESH MAHALING
MINISTER
Health & Family Welfare, Parliamentary Affairs,
Electronics & Information Technology, Odisha.

Telephone :
PBXNo. :
Mobile No.: 6372051004
Email: m.mahaling@odisha.gov.in
D.O. No.276 / MHFWPAE & IT

BHUBANESWAR

Date 23.09.2024

MESSAGE

It is a matter of great pleasure to know that IAMM Odisha Chapter is hosting the Annual Conference at PRM Medical College & Hospital, Baripada from 27th & 28th September 2024. A souvenir is being published in the event.

In the ever-changing landscape of microorganisms & infectious diseases, Medical Microbiologists play a greater role in proper diagnosis. Apart from diagnosis of infectious diseases they are also conducting various research projects which are crucial in developing new diagnostic kits, drugs, vaccines etc. to combat & predict outbreaks, and pandemics of infections and are important towards human wellbeing.

This conference will also aid in disseminating the rich cultural heritage of Baripada & ecological diversity of Mayurbhanj among the participants.

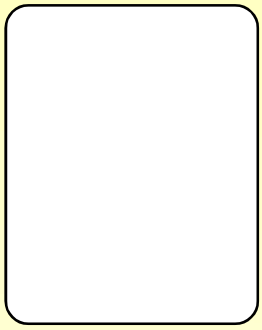
I convey my best wishes to the organizer for all success in their endeavor.

Mukesh Mahaling

(DR. MUKESH MAHALING)

Commissioner-cum-Secretary to
Government
Health & Family Welfare Department
Government of Odisha

Loka Seva Bhawan
Bhubaneswar - 751001
Tel. : +91-674-2536632
Email: orhealth@nic.in



MESSAGE

I a

(Shalini Pandit)

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
Director of Medical Education & Training,
Odisha, Bhubaneswar

Bhubaneswar
Date : 04.09.2024

MESSAGE

It is a matter of immense pleasure to know that the 15th Annual Conference of Indian Association of Medical Microbiologists, Odisha Chapter is going to be held at PRM Medical College & Hospital, Baripada from 27th to 28th September 2024.

The conference will serve as a platform for information of various aspects of Medical Microbiology, which will encourage the Post Graduates & help them to develop affinity towards different branches in the field. The workshop on research proposal writing which is organised is not only very important for those interested in research but also to each & every doctors. I urge the speakers and delegates to disseminate their knowledge & skills among all in this scientific occasion, which will ultimately benefit the patients & public. I am sure the conference shall discuss new diagnostic technologies in clinical microbiology, infection control strategies, vaccine development, amongst other relevant topics which will play an important role in resolving problems in disease control.

I express my profound gratitude to the Medical Microbiologists who worked on front lines in the COVID-19 Pandemic and expect the same if any time required in future.

I convey my best wishes to the entire fraternity associated in conducting this conference for their untiring efforts for making a fruitful conference.

(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. 339-vc /OUHS
Bhubaneswar

Date : 30.08.2024

MESSAGE

I am glad to know that 15th Annual Conference of Indian Association of Medical Microbiologists, Odisha Chapter (IAMMCON-OC) 2024 is going to be organized at Pandit Raghunath Murmu Medical College & Hospital, Baripada, Mayurbhanj on 27th & 28th September 2024. A souvenir is being released on the occasion.

I am sure that the association will continue to add immense value to the system encouraging its member to serve with great zeal for better outcomes that will benefit every citizen of our State.

I send my best wishes to the members and office bearers of the 15th Annual Conference of Indian Association of Medical Microbiologists Odisha Chapter organizing committee of PRM Medical College & Hospital, Baripada, Mayurbhanj on this joyous occasion and wish the celebration and publication a grand success.

(Prof. (Dr.) Manash Ranjan Sahoo)

Dr Susanta Kumar Sahu
President, IAMM
Odisha Chapter

MESSAGE FROM PRESIDENT...

It is to my immense pleasure that the Department of Microbiology, Pandit Raghuram Murmu Medical College & Hospital, Baripada is organizing the 15th annual conference of Indian Association of Medical Microbiologists (Odisha Chapter), IAMMCON (OC)-2024 on 27th & 28th September 2024.

This year the organizers have chosen "Evolving Landscape of Diagnosis for STIs" which is a very apt topic but less discussed topic among the medical academia. Even in this 21st century STIs are still considered as taboo and India is not yet overcome the stigma associated with it. That is why the measures for early diagnosis and prevention of STIs often fail affecting the reproductive health of the individual. I am confident the deliberations and discussions in the symposium will help the emerging microbiologists to sharpen their skills in this field. I also hope the "Souvenir" to be published to mark this occasion will be a memoir of this association.

I am equally delighted that the conference is being organized at Baripada, Mayurbhanj , the district with rich heritage and picturesque landscape. Taking over the torch from the 14th IAMMCON (OC) 2023 held in Koraput, this conference will definitely inspire other peripheral colleges to take over charge and open up the academic tour destinations in Odisha.

I again congratulate the organizing team and extend my best wishes for the success of the conference.

(Dr Susanta Kumar Sahu)

MESSAGE FROM SECRETARY...

Dr. Suneeta Sahu
Secretary, IAMM
Odisha Chapter

It gives me immense pride and happiness to write a message for theIAMMCON Odisha being organized at PRMMedical College and Hospital, Baripada. I am glad to mention that this is our 15th state chapter conference. This conference will be preceded by a workshop named "Knowing the nuts and bolts of Research" followed by the main conference whose theme has been very rightly chosen as "Evolving landscape of Diagnostics for STI's".

Sexually transmitted infections (STIs) remains a major public health challenge for people belonging to high-risk groups (for HIV) around the world.During the last twenty years, the National AIDS Control Organization (NACO) has undertaken the prevention of STIs as one of its key strategies in India. If left untreated, STI can lead to severe health complications, including pelvic inflammatory disease (PID), increased risk of getting HIV ,certain cancers, and even infertility.

STIs are curable, therefore rapid and accurate diagnosis will help in treating and curing this menace. Some of the STI's have data yet Mycoplasma genitalium is very ill studied and have meagre information. STIs burden low-and middle-income countries (LMICs) disproportionately;women and children are particularly vulnerable, and key populations (female sex workers, men who have sex with men) are at higher risk, understudied and underserved.Also, scale up of interventions and integration of services are lagging.The prioritization of STIs remains low despite the urgent need for accurate screening and treatment.

I am happy that we are getting this platform to deliberate on this topic at the conference so that more awareness can be created regarding the same.Rapid and accurate diagnosis for STIs should consider laboratory-based, as well as near point-of-care (POC) and true POC diagnostics.

Microbiologists play a very important role in guiding the clinicians about this theme and bringing a change in understanding and treating this issue.I am certain that this opportunity to interact with experts in the field on this very important topic will see through the gaps prevalent now.I hope all post graduate students will benefit after participating in the interactive sessions specifically curated for them.

My admirations for the hard work done to organize this event, gratitude to the speakers and all the delegates and I raise a toast for a super success of this most awaited academic event.

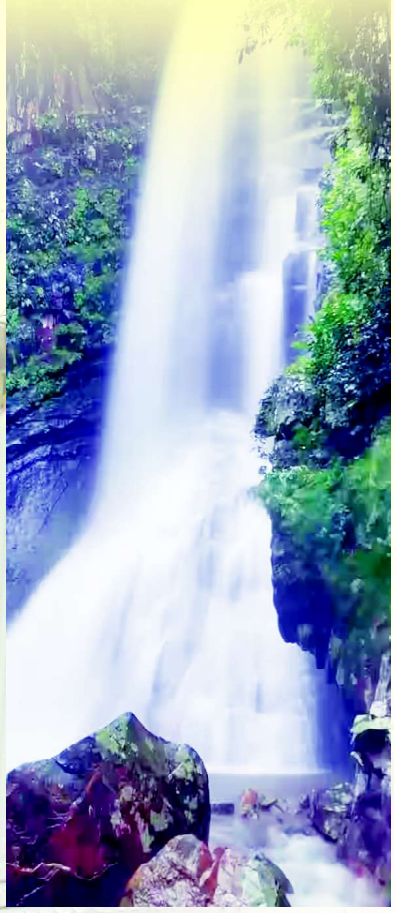
Welcome all to Baripada!! Long Live IAMM Odisha Chapter !!

Suneeta

(Dr. Suneeta Sahu)

FROM THE ORGANISING COMMITTEE...

Dr. Indrani Mohanty
Organizing Scretary
Professor & HOD
Dept. of Microbiology
PRMMCH, Baripada



Dear esteemed delegates,

Warm greetings!!!

On behalf of the organising committee, it is my pleasure to extend my heartfelt welcome to each one of you to the 15th Annual Conference of Indian Association of Medical Microbiologists, Odisha Chapter 2024 (IAMMCON-OC 2024), scheduled to take place on 27th and 28th of September in the Auditorium of Pandit Raghunath Murmu Medical College Baripada. Your presence will add immense value and we will be thrilled to have you join us for this intellectual gathering.

Our team has worked diligently to ensure that every aspect of the conference enhances your experience from the selection of topics to the seamless organisation of the events. We hope you find the conference both enlightening and enjoyable.

For the first time a Pre-conference workshop on "Research Methodology" is being organised, which will benefit the participants in the designing of research study

The theme of the Symposium, "Evolving landscape of diagnostics for STIs", will no doubt help to adopt uniform standardised diagnostic protocols which is very much the need of the hour.

The scientific agenda is packed with engaging sessions, oration, thought provoking discussions, exchange of intellectual ideas and a grilling quiz session for the postgraduate students.

Baripada is blessed with immense natural beauty with enthralling landscapes, scenic locations, famous tourist attractions like Similipal wildlife sanctuary, several antique historical monuments and religious places – a harmonious blend of tradition, heritage and modernity.

Looking forward to a remarkable gathering of diagnostic minds, where knowledge blossoms, collaborations thrive and friendships endure.

Long live IAMM-OC !!!

Warm regards

(Dr. Indrani Mohanty)

MESSAGE FROM CHAIRMAN...

Dr. Gitanjali Sarangi
Professor & Head
Dept.of Microbiology
FMMCH,Balasore
Chairman,Souvenir Committee

It is a matter of great pride that the PRM Medical College & Hospital, Baripada is organising the XVth Annual Conference of IAMM, Odisha Chapter. I had been assigned the task of Chairman, Souvenir Committee which is not only a tow task but also needs wisdom for selection of the manuscripts. In this context I thank Dr.Soumyakanta Sahoo, the Editor of the Souvenir for his effort in bringing out the Souvenir in a descent, tidy and colourful manner. I also thank the enumerable contributors for their manuscripts, research papers and the analytic experiments of the clinical cases.The Advertisers who have found a place in different pages of the Souvenir making it more attractive also need thanks.

Mayurbhanj is famous for its Chhau dance and Baripada, the district headquarter is best known by its Jagannath temple.

PanditRaghunathMurmu, the tribal guru from Santali culture is a great leader to promote the Santali language, its cultural heritage and uplifting the Santali people from the clutch of poverty,unhealthy environment and illiteracy.Naming the Medical College at Baripada in his name is a brilliant move of the Govt. in recognition of his dedication and sacrifice.

The Symposium on the theme "Evolving Landscape of diagnostics for STIs" will no doubt enrich the knowledge and add value to the professional and educational pursuits of the participants. The workshop, Paper presentation and Quiz competition etc will foster enchantment within the participants. More over, the Jagannath Temple, Similipal Forest and Sanctuary, different small dams and the natural beauty of Mayurbhanj will make all to achieve mental peace and harmony.

I hope the participants will be immensely benefited by attending the IAMMCON-24. Wishing the Conference grand success.

(Dr.Gitanjali Sarangi)

FROM THE EDITOR'S DESK...

Dr. Soumyakanta Sahoo
Senior Microbiologist & ICO.
Kalinga Hospital, Bhubaneswar

On behalf of the scientific committee of 15th Annual state conference of Indian Association Medical Microbiologists, I welcome you all to the scientific sessions. Medical Microbiology as a subject has undergone a sea change from microbes to molecules, even to nanomolecules and the progress is likely to move further in days to come.

Emerging and re-emerging infectious diseases are a major threat to the mankind, especially so in the developing world.

More than 1 million curable sexually transmitted infections (STIs) are acquired every day worldwide in people of 15-49 years old, the majority of which are asymptomatic. STIs have a direct impact on sexual and reproductive health through stigmatization, infertility, cancers and pregnancy complications and can increase the risk of HIV. Drug resistance is a major threat to reducing the burden of STIs worldwide. Accurate diagnostic tests for STIs using molecular technology are widely used in high-income countries. These are especially useful for the diagnosis of asymptomatic infections. However, they are largely unavailable in low- and middle-income countries

The symposium on sexually transmitted diseases is being organised which will enlighten us about the advances on early diagnosis, treatment and prevention on STI.

The scientific committee has made its best efforts to offer academic program and expect that all the participants will enjoy it mixed with cultural flavour of Baripada. I wish the organisers the very best for grand and successful conduct of the conference.

Jay Jagannath.

(Dr. Soumyakanta Sahoo)

ORGANIZING COMMITTEE

PRM Medical College, Academic block

OFFICE BEARERS OF IAMM (ODISHA CHAPTER)

Dr Susanta Kumar Sahu
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 Panigrahi

Dr Dharitri Mohapatra

Dr Bibhudatta Rautaraya

Dr Bijayani Behera

Dr Basanti Pathy

Dr. Indrani Mohanty

INDIAN ASSOCIATION OF MEDICAL MICROBIOLOGISTS

(Odisha Chapter)

Felicitates

Prof. (Dr.) Ashok Praharaj

Respected Sir,

Your dedication, hardwork and unwavering commitment in the field of Medical Microbiology will always be a source of inspiration for all of us.

Your remarkable journey began with MBBS from MKCG Medical College, Berhampur, followed by a distinguished career in the Army Medical Corps from 1977. You completed MD Microbiology from renowned Medical College AFMC Pune in 1985 & Ph.D (Medicine) from ICMR, RMRC Bhubaneswar in 1995. You have guided many postgraduate and Ph.D students during your tenure as a faculty. Among your innumerable achievements you have numerous publications in renowned national and international journals.

Your achievements have been recognized with many prestigious awards, including the General Master Silver Medal in Advance course for Pathology & Microbiology by DGAFMS in 1986 and the Best Article Medal twice by DGAFMS published in MJAFI. You are a member of many societies like American Society of Tropical Medicine & Hygiene, Infectious Disease Society of America, Society of Marine Medicine and many more. You have served as a Member Secretary of Hospital Infection Control Committee of AFMC Pune, AIIMS Bhubaneswar & KIMS Bhubaneswar.

As a dedicated professional for four decades of service, you have left an indelible mark in your work places.

We salute your dedication, perseverance, and passion for medical microbiology. This felicitation is a small token of our appreciation for your remarkable achievements and services.

President | Secretary | Organizing Secretary

Chairman Organizing Committee:

Dr. Pratibha Panda,

Dean & Principal, PRM MCH, Baripada

Chairman Reception Committee:

Dr. Rabidra Kumar Mishra

Superintendent, PRM MCH,Baripada

Organizing Secretary:

Dr. Indrani Mohanty

Treasurer:

Dr. Sasmita Hotta

Scientific Committee:

Chairperson:

Dr. Dipti Pattnaik

Souvenir Committee:

Dr. Gitanjali Sarangi

Dr. Soumyakanta Sahoo

Convenors:

Dr. Bimoch Projna Paty

Dr. Rajashree Panigrahy

Dr. M. V. Narasimham

Finance Committee:

Dr. Bhabani Patnaik

Dr. Bibhudutta Rautaraya

Hospitality & Catering Committee:

Dr. Sudipta Kumar Ram

Dr. Biranchi Narayan Nayak

Registration Committee:

Dr. Sasmita Khatua

Dr. Subhasmita Das

Dr. Sonam Swain

Dr. Shiteja Jena

15th IAMMCON (OC) - 2024

DAY - 1 (27th September, 2024)

PRE-CONFERENCE WORKSHOP: "Knowing the Nuts & Bolts of Research"

Time	Topic	Faculty
08:00 A.M.-08:30 A.M.	**Registration**	
08:30 A.M.-08:45 A.M.	Welcome Address & Objectives of the Workshop	Dr Basanti Kumari Pathi
08:45 A.M.-09:00 A.M.	Introduction to Study Designs	Dr Manoj Das
09:00 A.M.-09:45 A.M.	**Research Study Designs - I** **Observational Studies** • Cross-Sectional Study • Case-Control Study • Cohort Study	Dr Ashoka Mahapatra
09:45 A.M.-10:15 A.M.	**Research Study Designs - II** **Diagnostic Test Study** **Experimental Study Designs** • Randomized clinical trials	Dr Rajashree Panigrahi
10:15 A.M.-10:30 A.M.	**TEA BREAK**	
10:30 A.M.-10:45 A.M.	Recap of Study Designs	Dr Manoj Das
10:45 A.M.- 11:30 A.M.	• Framing research question • Hypothesis • PICOT • Writing Aims • Objectives • Outcomes	Dr Kumudini Panigrahi
11:30 A.M.-12:30 P.M.	**Hands-on practice** • Writing research question, hypothesis, aims & objectives, outcomes • Select study design **Activities break-up** • Five groups work on assignments (10 min) • Presentation & discussion- 5+5 min/group	Dr Manoj Das
12:30 P.M.-1:15 P.M.	**Biostatistics and Application – Part I** • Variables and normal distribution (types of data and variables, normal distribution, central tendency, skewness, kurtosis, confidence interval, standard deviation & error, IQR) • Expressing the relationship between variables (association, exposure-outcome variables)	Dr Manoj Das
1:15 P.M.-1:45 P.M.	**LUNCH BREAK**	
1:45 P.M.-2:30 P.M.	**Biostatistics and Application- – Part II** • Hypothesis testingo Choosing statistical tests (parametric, nonparametric, t-test, chi-square, ANOVA, correlation, regression)op-value, significance, power • Errors (type I & II)	Dr Manoj Das
2:30 P.M.-3:00 P.M.	**Sample size calculation and Sampling** • Sample size principles • Calculations for proportions, OR, RR • Use of table and software demonstration	Dr Manoj Das
3:00 P.M.-3:15 P.M.	**TEA BREAK**	
3:15 P.M.-3:30 P.M.	**Understanding the ethical issues in research** • Ethics principles in research • GCP, GLP, Data handling	Dr Basanti Kumari Pathi
3:30 P.M.-4:00 P.M.	Conducting literature search	Dr Manoj Das
4:00 P.M.-4:30 P.M.	**Valedictory**	
05:00 P.M. ONWARDS	**Conference Inauguration and Cultural Programme**	
08:00 P.M. ONWARDS	**GALA DINNER**	

15th IAMMCON (OC) - 2024

DAY- 2 (28th September,2024)

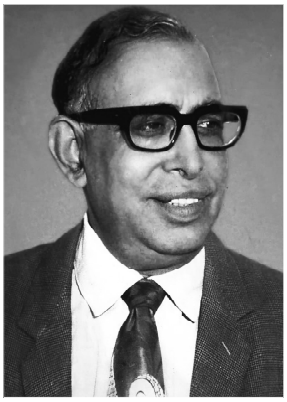
CONFERENCE PROGRAMME

TIME	PROGRAMME	SPEAKER	CHAIRPERSON
8:00 A.M.- 9:30 A.M.	**Registration & Breakfast**		
8:00 A.M.- 9:00 A.M.	Poster Presentation		
9:30 A.M.- 10:00 A.M.	Prof. (Dr.) Bikram Das Memorial Oration	Dr. Pallab Ray Former Prof. & Head Microbiology PGIMER, Chandigarh	Dr. Sudhir Ku. Ghosh Dr. Nirupama Chayani
10:00 A.M.- 11:30 A.M.	Symposium on **"EVOLVING LANDSCAPE OF DIAGNOSTICS FOR STIs"**		Moderator Dr. Suneeta Sahu
10:00 A.M- 10:20 A.M	Topic: Changing clinical scenario of STIs in India.	Dr. Satyadarshi Patnaik Prof. & HOD, Skin & VD MKCG Medical College, Berhmapur	Dr. Pritilata Panda Dr. Susanta Sahu Dr. Kundan Sahu
10:20 A.M-10:40 A.M	Topic: Recent advances in the diagnosis of non-gonococcal urethritis.	Dr. Bimoch Projna Paty Prof. & Head, Dept. of Microbiology, SJ Medical College Puri	
10:40 A.M-11:00 A.M	Topic: Challenges in the laboratory diagnosis and interpretation of Syphilis	Dr. Saroj Dash Asso. Prof. Microbiology PGICH, Noida, U.P.	Dr. Supriya Panda Dr. Dipti Pattnaik Dr. Dharitri Mohapatra
11:00 A.M-11:20 A.M	Topic: Diagnosing STIs in resource- constrained settings: Challenges and ways forward	Dr. Rani Sahu Consultant Microbiologist BSSCC & Research Institute, Bhubaneswar	
11:20 A.M-11:30 A.M	Felicitation of the Speakers, Chairpersons and Moderator		
11:30 A.M-11:40 A.M	Presentation: BD India Pvt. Ltd		
11:40 A.M.- 11:50 A.M	TEA BREAK		
11:50 A.M- 12:30 P.M.	Quiz for Post Graduate Students Quiz Master - Dr. M.V. Narasimham		Moderator Dr. Bhabani Patnaik
12:30 P.M.- 1:30 P.M.	General Body Meeting		
1:30 P.M.- 2:30 P.M.	LUNCH		
HALL - A 2:30 P.M.- 4.20 P.M.	Oral Paper Presentation (PG Award Paper)		Dr. Gitanjali Sarangi Dr. Parthasarathi Satapathi Dr. Indrani Mohanty
4.20 P.M. -4.30 P.M.	Presentation by Ortho Clinical Diagnostics India Pvt. Ltd.		
HALL-B 2:30 P.M.- 4.30 P.M.	Free Paper Presentation		Dr. Shreekant Tiwari Dr. Padma Das
4.30 P.M.-5:00 P.M	Valedictory followed by High Tea		

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

Name of the Resource Person	:	**Prof. (Dr) Pallab Ray**
Present Designation and affiliation	:	Former Professor & Head, Medical Microbiology, PGIMER, Chd. Currently, Visiting Faculty, KIMS, Bhubaneswar.
Areas of Interest:	:	Antimicrobial chemotherapy, staphylococcal infections, sepsis syndrome, HAI, medical education & teaching technology
Brief Bio sketch	:	● Guided >150 thesis and dissertations, >350 publications, mostly international ● Former In-Charge, ICMR National Surveillance Center of R in Enterobacteriaceae 2013-2023 ● Dr SC Agarwal memorial oration (2014), most prestigious award of the Indian Association of Medical Microbiologists ● Former President of Indian Association of Medical Microbiologists 2020-2021

Minimum Inhibitory Concentration (MIC) for Microbiologists and Clinicians

Dr Pallab Ray

Antibiotic susceptibility test (AST) on pure isolates is the mainstay of knowing the *in vitro* behaviour of them to antibiotics and predicting the *in vivo* success of therapy of an infection due to them. Disk diffusion (DD) AST, based on the zone of inhibition of isolated organism around an antibiotic disk, translated into susceptible, intermediate and resistant categories by comparing against clinical breakpoints, is sufficient for many of the bacterial infections. MIC-based susceptibility test, based on the lowest concentration of antimicrobial agent that prevents visible growth *in vitro* (PD profile), also translated into susceptible, intermediate and resistant categories by comparing against clinical MIC breakpoints, in combination with therapeutic drug monitoring (TDM, PK profile), can further help optimize antimicrobial therapy in specific cases. This is particularly indicated for patients who are severely ill, have chronic infections and those with prior exposure to multiple antibiotics. MIC-based therapy is also indicated in patients with renal compromise, augmented renal clearance and those with difficult-to-reach sites of infection (endocarditis, meningitis). The indications for MIC-based optimization can be broadly considered under microbiological and those for meeting PK-PD indices (with TDM). Microbiological indications include drugs for which DD-AST offers technical inadequacies to detect susceptibilities. The indications for PK-PD optimization works optimally with TDM and it goes beyond the common classification of antibiotics into concentration-dependent, time-dependent of mixed area under the curve (AUC) and MIC dependent. MIC and TDM also helps optimizing therapy to prevent overexposure leading to toxicity and underexposure leading to nonresponse. Underexposure is particularly common in ICU patients with sepsis and severe infections that alter body physiology and in situation with infection at sites difficult for the antibiotics to reach. In addition, both clinicians and microbiologists should be aware of the limitations of MIC as a susceptibility index, that includes incapability of most laboratories to perform it properly, inherent assay variations, truncated MICs (> or < the limited range tested) with semi-automated systems, and the discontinuous two-fold nature of the results that may cause serious dosing errors. In conclusion, many infections do not require MIC-based dosing optimization, and those which demand it, needs TDM and computer assisted regimens for optimal results.

National Symposium
On
Evolving Landscape
of Diagnostics for STIs

Changing Clinical Scenario of STIs in India

Author:
Dr. Satyadarshi Pattnaik
Prof. & HOD, Dept. of Skin & VD, MKCGMCH, Berhmapur

ABSTRACT

Sexually transmitted infections (STIs) are the most common among notifiable diseases. STIs are more dynamic than other diseases prevailing in the community. Their epidemiological profile varies from country to country and from one region to another within a country, depending on ethnographic, demographic, socioeconomic, and health factors. The clinical pattern is also a result of the interaction among pathogens; the behaviors that mediate their transmission and the effectiveness of preventive and control interventions.

According to recent studies the number of STI patients are rising, with a shift in the type of STIs. The recent studies concluded that fungal STIs (candidal balanoposthitis and vulvovaginitis) and viral STIs (herpes genitalis and condylomata acuminata) are on the rise and bacterial STIs (syphilis and chancroid) are declining. Declining the prevalence of bacterial infections may be due to the increasing sexual health awareness, indiscriminate use of antibiotics, and syndromic management of the infections by the physicians. Viral infections are more commonly seen because of their persistence and recurrences.

HIV infection, a global pandemic has affected the approach to the treatment of STIs very significantly, as the most important mode of HIV transmission is sexual, and the STIs also play a facilitative role in the acquisition and transmission of HIV. Moreover, the natural history, manifestations, and treatment of classic sexually transmitted diseases may be altered by the concurrent HIV infection.

Partner notification (PN) for STIs has been recommended as an important step in STI management to interrupt the transmission of infections and prevent potential reinfection and complications. PN provides an opportunity to make index patients aware of risk-reduction strategies for avoiding STIs, enables earlier diagnosis for partners, motivate behavior change in clients and partners, and reduce the burden of disease in communities.

The main strategy aimed at achieving the effective management for people with established infections has been to integrate STD services into the existing health-care system and syndromic management recommended by the National AIDS Control Organization.

Recent Advances in the Diagnosis of Non-gonococcal Urethritis

Author:
Dr. Bimochprojna Paty
Professor HOD, SJMCH, Puri

INTRODUCTION

Non-gonococcal urethritis (NGU) is a type of inflammation of the urethra and is considered the most common sexually transmitted infection (STI) in men. NGU refers to inflammation of the urethra that is not caused by gonorrhoeal infection. [1]

Urethritis patients typically present with penile discharge. Gonococcal urethritis can be differentiated from NGU by examining a Gram stain of the discharge. If Gram-negative diplococci are identified under the microscope, the urethritis is classified as gonococcal. In the absence of diplococci, the diagnosis is categorized as NGU. [2]

This syndrome is usually caused by sexually transmitted pathogens, including *Chlamydia trachomatis (CT), Neisseria gonorrhoeae (NG), Mycoplasma genitalium (MG), and, less frequently, pathogens such as Herpes simplex viruses 1 and 2, Trichomonas vaginalis (TV), or Adenovirus*, among others[3] However, the etiology remains unclear in up to 50% of cases, which is then classified as idiopathic urethritis. [4]

Trends show that rates of chlamydia in females are 2 times higher than that of males. Racial disparities exist, and blacks are 5.6 times more commonly affected with chlamydia when compared to whites. Like with chlamydia, infections rates are higher in adolescents and young adults.

ETIOLOGY

Bacterial-Chlamydia trachomatis, Ureaplasma urealyticum, Haemophilus vaginalis, Mycoplasma genitalium, Mycoplasma hominis, Neisseria meningitidis, Gardnerella vaginalis, Acinetobacter lwoffi, Acinetobacter calcoaceticus, and E coli. **Viral -**Herpes simplex virus, Adenovirus,Cytomegalovirus**, Fungi-**Candida albicans**, Parasitic-**Trichomonas vaginalis. **Noninfectious-**Urethritis can be caused by mechanical injury (from a urinary catheter or a cystoscope), or by an irritating chemical like some spermicide or antiseptics.

RECENT ADVANCES IN LABORATORY DIAGNOSIS

MICROSCOPY AND CULTURE

Automated urine flowcytometry (AUFC) of first voided urine (FVU)*Mycoplasma genitalium* and *Chlamydia trachomatis* urethral infections

InPouch® TV (A self-contained broth media device for the recovery and detection of Trichomonas vaginalis).

Detection of HSV1 ICP0 protein on Vero cell line using laser scanning confocal microscopy.

ANTIGEN DETECTION

Commercial EIAs for the detection of chlamdial antigens like Biostar OIA Chlamydia test,clearviewchlamydia,quickvue,CRTl are used.The sensitivity profiles of the commercially available *C trachomatis* EIAs range from 65% to 75% compared with NAA assays.

DFA test based on monoclonal antibodies directed against .The DFA test has approximately 75% to 85% sensitivity and 98% to 99% specificity compared with culture.

SEROLOGY

serological assay for *M. genitalium* using lipid-associated membrane proteins (LAMPs) as antigens was used in combination with Westernimmunoblotting to assess the immunoreactivity of women who were culture positive for *M. genitalium*[5].

Blood tests for dection of HSVboth IgM and IgG antibody can be detected.

MOLECUAR METHODS

Nucleic Acid Amplification

NAATs are the recommended choice for verification and are believed to be positive within the first 3–14 days after the sexual intercourse for C trachomatis lnfections.

Several NAA methods are currently licensed like Polymerase chain reaction [PCR] Amplicor (Roche Molecular Systems, USA), ligase chain reaction LCx assay (Abbott Laboratories, USA), transcription-mediated amplification AMP-CT and APTIMA Combo 2 (Gen-Probe Inc, USA), and strand displacement amplification ProbeTec (BD Diagnostic Systems, USA).

For Mycoplasma genitalium early NAATs amplified various fragments of the MgPa adhesin gene and enabled the detection of as few as 10 organisms [27,28].Real-time PCR assays that allowed the measurement of bacterial loads in clinical specimens using targets such as the MgPa gene, 16S rRNA, 23S rRNA, the 115-kDa-protein-encoding gene, and *gap*, encoding glyceraldehyde-3-phosphate dehydrogenase [30, 34] are also available.

The FDA-cleared Aptima MG (*Mycoplasma genitalium*) (Hologic, Inc.), cobas TV (*T. vaginalis*)/MG (Roche Molecular Systems), and Alinity m STI (Abbott Molecular Diagnostics) assays are fully automated tests available.

Urine-based polymerase chain reaction (PCR) techniqueare used for identification of *T vaginalis* in men.

Diagnosis of HSV or Adenovirus–NGU is only possible *via* NAATs using urethral swabs or first void urine, with high sensitivity.

NucliecAcid Hybridisation

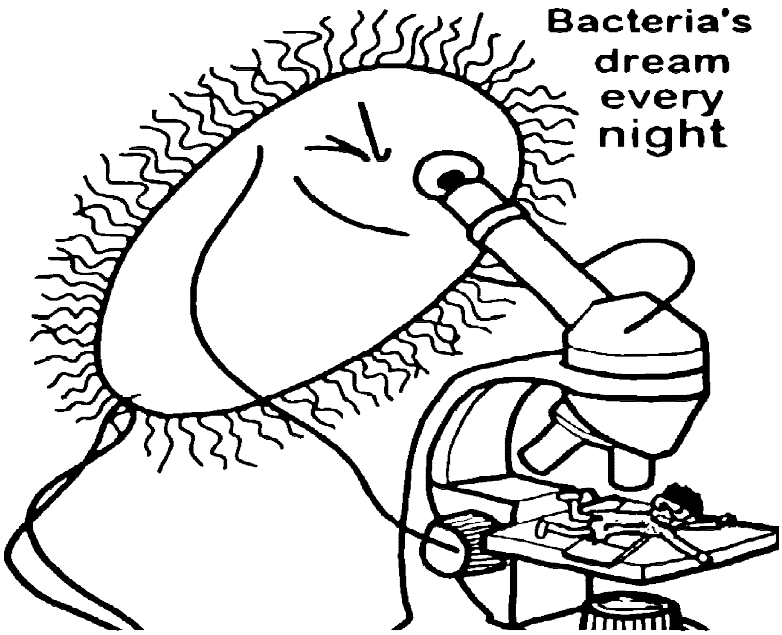
Commercially available NAH probe test (PACE 2, Gen-Probe Inc, USA) uses DNA-RNA hybridization in an effort to increase sensitivity by detecting chlamydial RNA.

CONCLUSION AND FUTURE PERSPECTIVES

Although great success was made in the diagnosis and treatment of STIs in the last decades, the incidence of many STIs is increasing for a variety of reasons. An ongoing threat is the rapid emergence of antimicrobial resistance of NG to a multitude of classes of antibiotic. Therefore rapid and correct diagnosis and treatment might be delayed, resulting in significant morbidity and a complicated course of the infection.

REFERENCES

1. Bowie WR. Urethritis in males. In: Holmes KK, Mardh PA, Sparling PF, et al., eds. Sexually transmitted diseases. 2nd ed. New York: McGrawempirical- Hill, 1990:627–39.
2. Bradshaw CS, Tabrizi SN, Read TR, Garland SM, Hopkins CA, Moss LM, Fairley CK. Etiologies of nongonococcal urethritis: bacteria, viruses, and the association with orogenital exposure. J Infect Dis. 2006 Feb 01;193(3):336-45.
3. Moi H, Blee K, Horner PJ. Management of non-gonoccoal urethritis. BMC Infect Dis. (2015) 15:294. doi: 10.1186/s12879-015-1043-4
4. Workowski KA, Bachmann LH, Chan PA, Johnston CM, Muzny CA, ParkI, et al. Sexually transmitted infections treatment guidelines, 2021 CDC. MMWRRecomm Rep. (2021) 70:1–187. doi: 10.15585/mmwr.rr7004a1
5. Baseman JB, Cagle M, Korte JE, Herrera C, Rasmussen WG, Baseman JG, Shain R, Piper JM. 2004. Diagnostic assessment of Mycoplasma genitalium in culture-positive women. J Clin Microbiol **42**:203–211. doi: 10.1128/JCM.42.1.203-211.2004.



Challenges in the laboratory diagnosis and interpretation of Syphilis

Author:
Dr. Saroj Dash
Associate Professor, Microbiology
PGICH Noida, U.P.

With the increasing number of patients infected with syphilis in the past 20 years, early diagnosis and early treatment are essential to decline syphilis prevalence. Owing to its diverse manifestations, which may occur in other infections, the disease often makes clinicians confused. Therefore, a sensitive method for detecting T.pallidum is fundamental for the prompt diagnosis of syphilis. Morphological observation, immunohistochemicalassay, rabbit infectivity test, serologic tests, and nucleic acid amplification assays have been applied to the diagnosis of syphilis. Morphological observation, including dark-field microscopy, silver-staining, and direct fluorescent antibody staining for T. pallidum, can be used as a direct detection method for chancre specimens in primary syphilis. Immunohistochemistry is a highly sensitive and specific assay, especially in the lesion biopsies from secondary syphilis. Rabbit infectivity test is considered as a sensitive and reliable method for detecting T. pallidum in clinical samples and used as a historical standard for the diagnosis of syphilis. Serologic tests for syphilis are widely adopted using non-treponemal or treponemal tests by either the traditional or reverse algorithm and remain the gold standard in the diagnosis of syphilis patients.Rapid, serological tests that can be performed at thepoint-of-care (POC) and meet the ASSURED criteria (theyare affordable, sensitive, specific, user friendly, rapid androbust, equipment-free, and deliverable) are now availablefor syphilis. In addition, nucleic acid amplification assay is capable of detecting T. pallidum DNA in the samples from patients with syphilis. Notably, PCR is probably a promising method but remains to be further improved.

Congenital syphilis (CS) has continued to be an often unappreciated butsignificant public health problem in developing countries like india. Diagnosis of CS also poses challenge as 50% are asymptomatic at birth and in Symptomatic infants, signs are subtle and non specific.Laboratory diagnosis of CS can be performed by Direct demonstration e.gdark ground microscopy(DGM) ,DFA-TP or silver staining, immunohistochemistry, PCR or by serological tests but at times,diagnosis by serological tests can be challenging as maternal nontreponemal and treponemal IgG antibodies can be transferred through the placenta to the fetus.

All the diagnostic methods currently used for syphilis diagnosis play important roles in various stages of syphilis.Together with diagnostic approaches other innovative approaches for populations at high risk should be piloted, with social network strategies andtechnologies which can be used to promote the uptake of testing.The use of a social entrepreneurship model ormonetary incentives to promote self-testing may be considered in the current scenario for improving testing and access to care.

Diagnosing STIs in resource- constrained settings: Challenges and ways forward

Author:
Dr Rani Sahu
Consultant Microbiologist
Bagchi Sri Shankara Cancer Centre & Research Institute
Bhubaneswar

Sexually Transmitted Infections (STIs) are considered a worldwide burden for public health which has a direct impact on reproductive and child health through infertility, cancers and pregnancy complications, and they have an indirect impact through their role in facilitating the sexual transmission of human immunodeficiency virus.

Over the years, there was decrease in STI caused by bacteria such as bacterial vaginosis, Gonococcal Urethritis, chancroid, syphilis. Availability of over the counter medicines, self medications and syndromic approach adopted by general physicians, and primary health centre doctors could be the probable reasons of this change. On the contrary, the viral diseases are known to persist or recur in spite of treatment and are widely spreading in the community, thus contributing to more number of viral STIs.To overcome limited access to laboratory aetiological diagnosis and treatment, syndromic case management was introduced by the World Health Organization (WHO) in 1984 and continues to be used as the standard of care by many countries, especially resource-constrained settings.This has been successful in reducing the prevalence of STIs over the years, but it has now reached its limits for many reasons, like varied clinical presentation, many new etiological agent evolved, increasing rates of antimicrobial resistance with limited treatment options which make it imperative that treatments should be based on aetiological diagnosis. In 2016, the WHO launched its global strategy for tackling STIs which includes improved surveillance through the development and implementation of better diagnostic algorithms and tests for the early diagnosis and identification of asymptomatic carriers (screening).More than 30 different bacteria, viruses and parasites are known to be transmitted through sexual contact, including vaginal, anal and oral sex. Eight pathogens are linked to the greatest incidence of STIs : syphilis, gonorrhoea, chlamydia and trichomoniasis, hepatitis B, herpes simplex virus (HSV), HIV and human papillomavirus (HPV).The common laboratory diagnostic procedures that can be done are: Dark-field microscopy-Syphilis, Gram staining for gonorrhea, non-gonococcal urethritis, chancroid, bacterial vaginosis, Tzanck smear for herpes genitalis, donovanosis, molluscumcontagiosum , Wet mount for trichomoniasis, KOH mount for candidiasis , Bubo aspiration and smear for LGV and chancroid. The correct method of specimen collection helps in achieving desirable goals in the laboratory diagnosis of STIs . Sterile cotton, calcium alginate, dacron rayon or polyethylene terephthalate (PET) swabs with plastic or aluminium shaft or bacteriological loop can be used for collecting the specimen. Urethral swab should be collected at least 2 hours after urination as voiding decreases the

amount of exudates. The first 10-15 ml of the early morning first void urine is collected in a sterile plastic container. Vaginal swab should be collected in prepubertal / unmarried girls and women who have undergone hysterectomy, not endocervical swab.POCTs are essential to address the challenges. which should be as per the ASSURED criteria (affordable, sensitive, specific, user-friendly, robust/rapid, equipment free and delivered to end users).Though some POCTs exist, but in resource-constrained settings implementation become difficult at the levels of device, patient, provider and health system so finally make them unavailable in most.There are several syphilis Rapid Diagnostic Tests (Bioline Syphilis 3.0, Trustline Syphilis Ab test, Aspen Syphilis Rapid Test etc) for screening. The main challenge with most syphilis RDTs, is the inability to differentiate active from previously treated infection. To overcome it, Rapid Plasma Reagin (RPR) as a sequential test should be done which detects non TP antibodies, indicating an active infection.Combination of HIV and syphilis test (Standard Q HIV/Syphilis combo, Onsite HIV/Syphilis combo rapid testetc)should be implemented to increase the screening population. Apart from ELISA and PCR POC devices (*OnSite* Duo HSV-1/2 IgG/IgM Rapid Test, ACCUTELL HSV1/2 IgM rapid test)available for early herpes diagnosis. Among all ,many rapid test kits for HIV& HBV are widely used. Few rapid kits(Accu-Tell Gonorrhea rapid test cassette and Sure Chlamydia Ag rapid test kit) available for Gonorrhea and Chlamydia which can be done from swab and urine. Cepheid GeneXpert CT/NG is a new Food and Drug Administration (FDA)-approved rapid molecular assay for simultaneous detection of N. gonorrhoeae and C. trachomatis. This assay is the first genetic point-of-care assay that amplifies the chromosomal targets of the organism. Xpert HPV is an accurate, fast, on-demand PCR test that provides actionable results in about an hour. Xpert® TV is the First Molecular*Trichomonas Vaginalis*Test for both women and men.Most of the recommended highly sensitive and specific NAATs require resources, training, laboratory infrastructure, longer time for results, and are expensive, thus making the minimum accessible for many resource constrained settings.

The syndromic case management guidelines for STI should be updated through the integration of laboratory tests. STI screening strategies are needed to address asymptomatic STIs to know the actual burden as they do not initially cause symptoms, which results in a risk of passing the infection on to others. Affordable POCT are urgently needed in resource-constrained settings to support the effective management of STI and it has to be supported by the Government to make them available.

"Congratulations! He hasn't got MRSA."

LIST OF PRESENTATIONS

SL.NO.	CODE NO.	NAME	TOPIC
AWARD SESSION			
1	OP-01	Dr. Suryasnata Dash	A study of microbiological profile in patients of spontaneous bacterial peritonitis (SBP) in a tertiary care hospital
2	OP-02	Dr Seema Rani Sahoo	Association of leptospiros is with occurrence of CKD of uncertain aetiology (CKDu) among patients attending a tertiary care hospital
3	OP-03	Dr. Swadharani Panda	Bacteriological study of surgical site infections (SSI) in a tertiary care hospital of southern Odisha
4	OP-04	Dr. Adrita Das	Comparison of catheter related -blood stream infection versus non catheter related BSI in intensive care unit – prospective observational study
5	OP-05	Dr Sonalika Swain	Detection of colistin susceptibility of carbapenem resistant gram negative Enterobacterales from different clinical samples in a tertiary care hospital
6	OP-06	Dr. Pratikhya Behera	Utilization of film array meningitis-encephalitis panel as a molecular point-of-care test (POCT) with a suggestive diagnostic algorithm for CNS infected critically ill patients in eastern India.
7	OP-07	Dr. Sugyanirani Hotta,	Aretrospective study on the prevalence of ESKAPE pathogens isolated from the blood culture specimens of various ICU patients admitted in a tertiary care hospital in southern Odisha
8	OP-08	Dr Sourav Saha	Astudy on hypervirulent *Klebsiella pneumoniae* isolated from blood stream infection patients in a tertiary care hospital
9	OP-09	Dr. Shubhashree Acharya	Spectrum of bacterial infection in paediatric cancer patients and antimicrobial susceptibility patterns in a tertiary care hospital
10	OP-10	Dr. Smrutisree Mohapatra	Bacteriological profile of ventilator associated pneumonia (VAP) among stroke patients in a tertiary care hospital

SL.NO.	CODE NO.	NAME	TOPIC
FREE PAPER			
1	OP-11	Dr. Sephali Agarwal	Bacteriological profile of diabetic foot ulcer in southern part of Odisha.
2	OP-13	Dr. Adyasha Mohanty	Study on phenotypic detection of virulence markers among *Candida species* isolated from clinical specimens
3	OP-14	Dr Chinmayee Panda	Identification of *Candida spp.* and the virulence factors phenotypically and genotypically with antifungal susceptibility pattern in vulvovaginit is cases visiting the tertiary care hospital.
4	OP-15	Dr SUDESHNA SINGHA	Mycological profile of bronchoalveolar lavage (BAL) samples in patients hospitalised in pulmonary units in a tertiary care centre
5	OP-16	Dr Lalit Prakash Majhi	Study of virulence factors and anti-fungal susceptibility of fungi isolated from otomycosis patients.
6	OP-17	Dr. Subhashree Barala	Microbiological profile of chronic suppurative otitis media(CSOM) in a tertiary care centre
7	OP-18	Dr. Rakesh	Bacteriological profile in acute exacerbation of COPD patients attending a tertiary care hospital in southern Odisha
8	OP-19	Dr Dipsa Routray	Prevalence of viral pathogens and their clinical correlation among patients with acute respiratory illness in a tertiary care hospital
9	OP-20	Dr.TSiwani	Resurgence of mumps cases - suspicion of outbreak?
10	OP-21	Dr. Aruna Rani Behera	Antimicrobialstewardship awareness among doctors of a tertiary care hospital in eastern Odisha: a cross-sectional study
11	OP-22	Dr. Roshni Dandapat	Evaluating knowledge, attitudes, and hand hygiene practices among healthcare professionals in a recently established tertiary healthcare facility in eastern India using a questionnaire-based study
12	OP-23	Dr. Monalisa Subudhi	Assessment of artificial intelligence platforms with regard to medical microbiology knowledge; an analysis of chat GPT and Gemini

SL.NO.	CODE NO.	NAME	TOPIC
POSTER			
1	PP-01	Dr. Soumya Subhadarshini	Sensitivity pattern of cefiderocol, an upcoming antibiotic to carbapenem resistant *Acinetobacter* spp.& P*seudomonas spp*.
2	PP-02	Dr. Siaryong Kalpana Aimol	Bacteriological profile of catheter associated urinary tract infection (CAUTI) among patients in a tertiary care hospital,
3	PP-03	Dr.Prajna Nayak	Case report on chromoblastomycosis
4	PP-04	Dr Utkal Nayak	Bacteriological profile of pleural fluid in empyema thoracic in a tertiary care center
5	PP-05	Dr Sarada Priyadarshini	Microbiological profile& antimicrobial sensitivity pattern of culture isolates in PICU in a tertiary care hospital.
6	PP-06	DrGowri Thampy B.	*Burkholderiacepacia* infection in a 45year old female with aspergilloma- a case report
7	PP-07	Dr. Nirlipta Nayak	Bacteriological profile and antibiogram of endotracheal aspiration in a tertiary care hospital of western Odisha
8	PP-08	Dr Swayam Swastik Sahoo	Importance of stool microscopy and culture in diagnosing disseminated intra-abdominal tuberculosis in a Hepatitis B positive patient: a case report
9	PP-09	Dr. Deba Prasad Mishra	Seroprevalence of Scrub typhus among pyrexia of unknown origin patients: a study from tertiary care hospital, Odisha
10	PP-10	Dr Soumya Mohanty	A comparative study of serological test RPR&TPHA for diagnosis of syphilis in PLHIV patients at a tertiary care hospital.
11	PP-11	Dr. Aswini Kumar Sahu	Cross-sectional study on the prevalence of *Mycobacterium tuberculosis* causing lymphadenitis in a tertiary care centre in southern Odisha
12	PP-12	Dr. Pintu Kumar	Bacterialprofile and antimicrobial susceptibility pattern of adult septicaemia in a tertiary care hospital in western Odisha
13	PP-13	DrIsha Kumar Khobragade	*Streptococcus pneumoniae*bacteraemia in paediatric patients: a report of three cases
14	PP-14	Dr Swadhina Choudhury	Microbiological profile of urinary tract infection in patients with type 2 Diabetes mellitus – aretrospective hospital based cross-sectional study
15	PP-15	Dr Manaswini Patro	Incidence of catheter associated urinary tract infections in medicine ICU in a tertiary care centre of eastern Odisha

16	PP-16	Dr. MitrabindaPattnaik	Spectrum of organisms responsible for neonatal sepsis and their antimicrobial sensitivity in a tertiary care hospital in western Odisha.
17	PP-17	Dr.NagendhiraRaju.M	Blood stream infection due to pigmented *Burkholderiacepacia* complex in cases of haematological malignancy: a report of three cases
18	PP-18	Dr. Sameekhya Dash	Trends of MICs of vancomycin towards MRSA strains in a tertiary health care centre of southern Odisha
19	PP-19	Dr Nikita Das	Prevalence of Hepatitis B among jaundiced cases in paediatric age group in atertiary care centre
20	PP-20	Dr. Mohammed Abdul Mazid	A case report on botryomycosis on both buttocks
21	PP-21	DrJyotsna Padhan	Bacteriological profile and their antibiotic susceptibility pattern of bloodstream infection isolates - a study from tertiary care hospital.
22	PP-22	Dr. Vijayalaxmi Hansdah	Clinical and mycological patterns of superficial mycoses in a tertiary care hospital of eastern Odisha
23	PP-23	Dr. Nishikanta Muduli	Antibiotic susceptibility profile of *Salmonella Typhi*and p*aratyphi* a from blood samples in a tertiary care hospital
24	PP-24	Dr Ashish Pratihari	Study of mycological profile of otomycosis in a tertiary carecentre,western Odisha
25	PP-25	Dr. Rohan Pandey	Disseminated Talaromycosis: a report of two cases in southern Odisha
26	PP-26	DrSidhanta Kumar Behera	Serodiagnosis of Japanese encephalitis in a tertiary care hospital, western-Odisha.
27	PP-27	DrNishikanta Sahoo	Bacterial profile and antimicrobial susceptibility patterns of isolates amongpatients diagnosed with surgical site infection at a tertiary care hospital.
28	PP-28	Dr. Priyanka Mahapatra	A study on susceptibility of carbapenems producing Enterobacterales and *Pseudomonas aeruginosa* to aztreonam and ceftazidime-avibactam combination at a tertiary care hospital
29	PP-29	Dr Bijayalaxmi Patra	Laboratory diagnosis of Typhoid fever using blood culture, Widal and rapid diagnostic tests.

AWARD SESSION

OP - 01

A Study of Microbiological Profile in Patients of Spontaneous Bacterial Peritonitis (SBP) in a Tertiary Care Hospital

Dr. Suryasnata Das

INTRODUCTION

SBP is an acute bacterial infection of the peritonial fluid occuring in absence of a contagious source of infection and in the absence of an intra-abdominal inflammatory focus.

Common clinical signs are fever,abdominal painand vomiting.

The diagnostic criteria for SBP are

1. Polymorphonuclear cell count e" 250 cells/ml in ascitic fluid, and
2. Positive ascitic fluid culture of only one bacteria.

OBJECTIVE

This prospective study was done toisolate and identify causative microorganisms in patients with SBP and to determine their antibiotic sensitivity patterns.

METHODS

Ascitic fluid was collected aseptically by abdominal paracentesis frompatientwith ascites present in Department of Medicine.

About 50 ml of ascitic fluid was aspiratedwith a sterile syringe.10 ml was inoculated into a blood culture bottle with 100 ml of BHI broth for culture at bedside.10 ml fluid each was sent for Gram&ZN staining,for biochemical testsand for cell count and cytology.

The samplefor culture was incubated at 37°C for 24 hours after which subculture was done on Sheep blood agar and Mac Conkeyagar.The bottle were re-incubated till 7days.2 subcultures were done on 5th and 7th day.

If growth was observed,the isolate was identified by conventional identification methods.Antibiotic susceptibility testing was done according to CLSI recommendations.

RESULTS

Total 138 samples were processed.Culture positivity was 28%.Gram negative bacteria constituted 74% of isolates.*Escherichiacoli*(18) was the most common isolate,followed by *Staphylococcus aureus*(10).Allisolates of *Escherichia coli* were sensitive to meropenam and piperacillin-tazobactam.

DISCUSSION

Culture positivity was 28% which is comparable with Bhat *et al*. *Escherichiacoli* was the most common isolate which is concordant with Mohan *et al*.

CONCLUSION

Early detection of SBP and its prompt treatment should be done to decrease high mortality.

OP - 02

Association of Leptospirosis With Occurance of CKD of Uncertain Aetiology (CKDU) Among Patients Attending a Tertiary Care Hospital

Dr Seema Rani Sahoo

INTRODUCTION:

Chronic kidney disease(CKD) is emerging as a significant health problem in odisha as well as all over India.Severe CKD without any traditional risk factors like hypertension,diabetes,glomerulonephritis has been reported from countries like Sri Lanka,India,Central America,Egypt in last two decades and termed as CKD of unknown etiology(CKDu).This is serious and fatal due to late recognition and rapid disease progression.Diverse risk factors,both environmental and behavioural such as contaminated drinking water,alcohol consumption,family history,use of nephrotoxic drugs,frequent use of agrochemicals,zoonotic diseases,consumption of heavy metals were proposed for the etiology of CKDu.Leptospira owing to its frequent involvement and colonization in kidney in chronic leptospirosis has been considered to be a prime suspect of CKDu.

OBJECTIVE:

Considering the above background information,the study was designed

- To find out seropositivity of leptospirosis among patients with CKD of unknown etiology.
- To do qualitative detection of leptospira specific DNA
- To generate the sociodemographic data of seropositive CKDu patients.

METHODS:

This is a hospital based prospective cohort study conducted in dept of Microbiology in collaboration with dept of nephrology. 5ml of blood and 10ml of urine was collected from the patients.Serum was separated and tested for IgM ELISA and urine for leptospira PCR testing.

RESULTS:

Out of 42 cases of CKDu,3 (7%) were found positive for leptospira by IgM ELISA method and PCR method.Cases were more in young adult male agricultural workers from rural areas.

DISCUSSION & CONCLUSION:

Past infection of Leptospira is significantly associated with occurance of CKDu indicating a possible future risk of developing of CKDu in healthy young individuals living in CKDu prevalent areas.So early detection of leptospirosis and proper treatment helps to reduce the chronicity of the disease and its progression to fatal renal involvement.

OP - 03

Bacteriological Study of Surgical Site Infections (SSI) in a tertiary care hospital of Southern Odisha

Dr Swadharani Panda

INTRODUCTION:

Surgical Site infections are defined asinfections that develop at the surgical site within 30 days of surgery (or within 90 days for some surgeries such asbreast,cardiac and joint surgeries including implants).

OBJECTIVES:

1) To study the prevalence of aerobic and anaerobic pathogens causing SSI in patients admitted to different departments of MKCG.

2) To study the various risk factors associated with SSIs

3) To determine AST pattern of the isolated pathogens.

METHODS:

Aspirated pus or swab from the infected site was collected aseptically within 24 hours of clinical diagnosis of SSI,transported to the microbiology laboratory and processedfor Gram staining,culture (aerobic and anaerobic),phenotypic identification and AST.

RESULTS:

The incidence of SSI was 26% (165/635)with maximum cases from the Department of Surgery (n=100). Diabetes was the most common predisposing factor followed by UTI. Out of 165 SSI cases,120 (72%) were culture positive of which 49 were monomicrobial while 71 were polymicrobial.Staphylococcus aureus was the most common (47.5%) aerobe isolated among which 44% were MRSA.Total 30 number of anaerobic bacteria were isolated and all were identified to beClostridium perfringens.

DISCUSSION:

The findings of our study regarding incidence of SSI,department wise contribution,culture positivity rate,percentage of aerobic/anaerobic bacteria plus percentage of monomicrobial/polymicrobial growth,most common aerobic isolate, percentage of MRSA strains is concordant with Jain et al 2019,Arti Jain et al 2020,Ramaiah et al 2021,Akhi MT et al 2021, Gupta et al 2019,Khyati Jain et al 2020 respectively.

CONCLUSION:

Diabetes Mellitus is the most important risk factor associated with SSI.Preoperative antibiotics, reduced hospital stay and proper control of comorbidities may decrease the incidence of postoperative infections significantly.

Department of Microbiology, PRM Medical College & Hospital, Baripada

OP - 04

Comparison of Catheter Related -Blood Stream Infection versus non catheter related BSI in Intensive Care Unit - Prospective Observational Study

Dr. Adrita Das

BACKGROUND:

Catheter related blood stream infection (CRBSI) makes up a significant proportion of Hospital acquired infection and increases the morbidity and mortality of those affected. [1] The term 'CR-BSI' is used for the purpose of clinical diagnosis and treatment which requires definite laboratory evidence that CVC (central venous catheter or central line) is the source of Blood stream infection. CVC are inserted for haemodialysis, measuring central venous pressure, chemotherapy drug infusion and for parenteral nutrition. Major risk factors include prolonged stay in the ICU, longer duration of catheterization and associated comorbidities. Diagnosing CRBSI requires the same organism to be isolated from the central line and peripheral line with a differential time to positivity of more than 2 h. There should not be any other obvious source of infection.

AIMS AND OBJECTIVES

1. To analyse Microbiological profile of CRBSI and their Antibiogram

2.Risk factors analysis and Clinical outcomes of patients with Catheter Related Blood Stream Infection (CRBSI) and without Catheter related Blood stream infection.

3. Clinical Outcomeof CR-BSI patients with respect mortality, morbidity in terms ofi.Shock, chronic kidney disease, infective endocarditis ii.Length of stay in ICU

METHODOLOGY

Two 10 ml samples for blood culture were drawn from CVC and peripheral line under aseptic precautions and inoculated in automated bottles (10 ml) of BacT/ALERT and incubated. Bottles flagged positive were subjected to gram staining, sub-culture on blood agar and MacConkey agar. After overnight incubation, isolated colonies were identified and antimicrobial susceptibility test was done in Vitek-2 automated system according to the standard protocol. The clinical course of the patients was closely followed. Clinical outcome of CRBSI patients was studied with respect tomortality, morbidity in terms of i. shock, CKD, IE ii.Length of stay in ICU.

RESULTS:

A total of 36 patients developed CRBSI and majority were male. Male to female ratio was 2.5:1. Majority (64%) of the microbial pathogens were gram negative bacteria followed by gram positive bacteria (19.4%) and yeast (16.6%). Klebsiella pneumonia (33%) and Escherichia coli (8.33%) were the most common

gram negative organisms. CONS(8.33%) and Enterococcus spp.(5.55%) were the most common gram positive organism isolated. 6 (16.6%) developed Candida infection. Most of the Klebsiella pneumonia were MDR pathogens sensitive to Amikacin, Aztreonam, tigecycline and resistant to Ceftriaxone, cefepime, meropenem, imipenem, piperacillin-tazobactam and cotrimoxazole. CONS were found to be sensitive to linezolid, tigecycline, vancomycin and tetracycline. Candida spp. were mostly sensitive to caspofungin, micafungin andvoriconazole. Clinical outcomes were selected with respect to mortality, complications and length of ICU stay. Mortality was highest (30%) in CRBSI followed by colonizers (23%). Incidence of septic shock was highest among CRBSI patients (30%). Length ofstay for >10 days in ICU was highest among BSI (94%) followed by CRBSI (80%). The incidence of septic shock was highest among CRBSI patients (30%).

DISCUSSION AND CONCLUSION:

In our study, the most prevalent causative pathogens were gram negative organism which was similar to findings of Balajiet al.(2021). We found the most prevalent organism to cause CRBSI to be Klebsiellapneumoniaewhereas Pandit et al. (2019) reported CONS to be the most commonly isolated organism. Futhermore, we found 16% of the isolates to be Candida spp which was reported to be 4.7% by Panditet al.(2019).The study highlights the importance of regular surveillance programs, efficient infection control program, strict adherence to antiseptic measures and use of a rational antibiotic policy for the early diagnosis and better management of CRBSI.

OP - 05

Detection of Colistin Susceptibilty of Carbapenem Resistant Gram Negative Enterobacterales From Different Clinical Samples in a Tertiary Care Hospital

Dr. Sonalika Swain

INTRODUCTION:

Carbapenem Resistant Enterobacterales (CRE) are a major cause of community as well as healthcare associated infections and have limited treatment options.Increased geographical spread of carbapenem resistance among enterobacterales with a Prevalence of 4% globally and and 37% in india.

Measuring the magnitude of the problem of CRE, is important for making strategies to lower its spread.Colistin is considered to be the last resort for the management of infections caused by multi drug resistant (MDR) gram-negative bacilli (GNB). However, in the recent past, there has been a rise in colistin resistance among MDR isolates in clinical settings.

OBJECTIVE:

Identification of Prevalence of Carbapenem resistant Gram negativeEnterobacteralesanddeterminarion of susceptibility pattern of Colistin in Gram negative Enterobacterales.

MATERIALS AND METHODS:

A total of 195 carbapenem-resistant Enterobacterales isolates were screened for Meropenem resistance and tested for colistin susceptibility by commercial broth microdilution (cBMD),.

RESULTS:

The overall prevalence of CRE over a period of two years was found to be 25.67%. Among the CRE isolates, maximum wereklebsiellapneumoniae (70%).Majority of the patients wereneonates with male preponderance (118/195) 61%.The Colistin resistance by micro broth dilution method in our study was found to be(12/195) 6%,Colistin had shown highest susceptibility against CRE from blood sample 84/88i.e95.45%, followed by pus and urine i.e 29/32(90.62%) and 6/8(75%) respectively.DISCUSSION:Chiragmodi et al.,showed the highest isolates were Klebsiellapneumoniae with a CRE prevalence of 29% which was concordant with our study.

CONCLUSION:

Our results highlight the distribution of carbapenem resistance and colistin-sensitivity amongEnterobacteralesisolated from tertiary care hospital of the Southern odisha and asconventional BMD has many technical complexities, cBMD is a better viable alternative.

OP - 06

Utilization of FilmArray Meningitis-Encephalitis panel as a molecular point-of-care test (POCT) with a suggestive diagnostic algorithm for CNS infected critically ill patients in Eastern India.

Dr. Pratikshya Behera

INTRODUCTION:-

Meningitis and encephalitis are potentially life-threatening, central nervous system (CNS) infections due to its increased mortality rate. Comprehensive testing for CNS samples by standardized phenotyping methods including biochemical tests, culture methods and conventional molecular techniques such as polymerase chain reaction (PCR) are time consuming, and less yielding compared to multiplex PCR.In recent decades, FilmArrayMeningitis-Encephalitis (ME) panel has been widely used as POCT for effective management of CNS infected patients.

OBJECTIVE:

1. To compare between conventional and molecular syndromic approach methods.
2. To suggest an effective diagnostic algorithm for CNS infections in critically ill patients.

METHODS:

Consecutive non-repeated cerebrospinal fluid (CSF) samples (n=83) were collected from patients suspected with CNS infections at IMS and SUM Hospital, Bhubaneswar over a period of 2 years. All were subjected to routine culture exercise including VITEK-2, and molecular FilmArray ME panel testing. A diagnostic algorithm was formulated for rapid detection and effective management.

RESULT:-

Fifteen (18.07%) out of 83 samples tested positive using ME panel, of which S.pneumoniae (n=7,46.6%), Herpes simplex virus 1 (HSV1) (n=5,33.3%) and Enterovirus(n=2,13.3%) were most frequently detected. In microbiological examination, all cultures werenegativeexcept one case from which Klebsiella pneumoniae was isolated. A detailed diagnostic algorithm was suggested following antimicrobial stewardship guideline by using conventional culture and molecularmethods at same time for rapid microbial detection.

DISCUSSION:-

In this study,FilmArray proved to be a rapid (1 hour 20 minutes) multidisciplinary approach than conventional methods,aiding in better clinical correlation.Detecting pathogens that are fastidious and difficult to isolate is an added advantage of ME panel which corroborates with earlier studies.

CONCLUSION:

Utilization of ME panel though being expensive,is life-savingand helps in timelyspecificmanagement of critically illCNS patients reducing prolonged hospital stay, and thus preventing further suppurativeinfections.

OP - 07

A retrospective study on the prevalence of ESKAPE pathogens isolated from the blood culture specimens of various ICU patients admitted in a Tertiary Care Hospital in southern Odisha.

Dr. Sugyanirani Hotta

INRODUCTION

HospitalAcquired Infections (HAIs) are in the rise worldwide.The ESKAPE(Enterococcus faecium, Staphylococcus aureus, Klebsiella pneumoniae, Acinetobacter baumanii, Pseudomonas aeruginosa, Enterobacterspecies) pathogens are one of theimportant causative agents of HAIs. As ICU patients are usually on broad spectrum antibiotics, it results in selective antibiotic pressure leading to emergence of multi-drug resistance.

OBJECTIVE:

To estimate the prevalence of ESKAPE pathogens isolated from blood culture specimen from various ICU patients.

METHODS:

This is a retrospective study conducted in the department of Microbiology, MKCG MCH.Data was collected on organism Isolation, Identification & Anti-microbial Susceptibility results from blood cultures of various ICU patients, from the month of Apr-23 to Mar-24.Adequate amount of aseptically collectedblood samples were inoculated into Brain Heart Infusion Broth and incubated at37?C, then sub-cultured onto MacConkey Agar at 24Hrs, 48Hrs and on 5th day of incubation. The growth obtained was identified by colony morphology, gram stain & appropriate biochemical tests. Anti-microbial susceptibility test was performed by Kirby-Bauer DD method on MHA plates & results was recorded following CLSI-2023 guidelines.

RESULTS:

Out of 1389 samples growth observed in 632(45.5%) samples. Among 1389 samples, 809 were collected from SNCU, 206 from NICU, 185 from PICU and 189 from CICU respectively. The prevalence of ESKAPE pathogens was found to be 85.2%.

DISCUSSION:

The prevalence of ESKAPE pathogens was 85.2%, which was almost similar tothe study conducted by Ashopaet al., (2020).

CONCLUSION:

Results from this large dataset shows importance of ESKAPE pathogensin our setup.

OP - 08

A study on Hypervirulent Klebsiella pneumoniae isolated from Blood stream infection patients in a Tertiary care hospital.

Dr. Sourav Saha

INTRODUCTION/BACKGROUND

- Klebsiella pneumoniae is one of the most important bacterial pathogen causing variety of infections
- During past two decades a new variant termed as hypervirulent K. pneumonae(hvKP) has been reported.
- Several traits have been associated with hypervirulent K.Pneumoniae such as hyperviscous phenotype,predominance of K1 and K2 capsule type and carriage of multiple virulence gene.(eg. iutA, mrkD , rmpA, rmpA2, iroBCDN and iuc ABCD)

AIM & OBJECTIVES

- To isolate and identifiy K.pneumoniae from blood specimen of clinically suspected patients with blood stream infection.
- To identify hypervirulent Klebsiella pneumoniae among K.pneumoniae isolates and perform their antimicrobial susceptibility test.
- To access the risk factors and clinical outcome of hypervirulent K.pneumoniae causing blood stream infection.
- To find out the virulence gene associated hv K .pneumoniae

MATERIALS AND METHODOLOGY :

- Blood sample is collected from clinically suspected patients with bacterial blood stream infection
- Blood culture is done by automated method i.e Bact- Alert and identified by VITEK -2 automated platform(bioMerieux).
- K. pneumoniae isolates is identified
- Hypermucoviscous variant K. pneumoniae are phenotypically identified by positive string test as hypervirulent(hv) K.pneumoniae
- Comparision of resistance pattern of hv K. pneumoniae with with the classical K.pneumoniae is done
- ESBL and Carbapenamse producers are detected among all K.pneumoniae isolates
- Detection of virulent gene of hypervirulent Klebsiella pneumoniae isolates by PCR based detection technique.

RESULTS :

- 11 isolates out of 106 K.pneumoniae isolates were identified to be hypervirulent K.penumoniae(hvKP) with a resultant frequency of 10.3 % .
- Virulence genes iutA & mrkD, were detected in 90.9% & 81.8 % isolates respectively.

DISCUSSION & CONCLUSION :

- Overall frequency of hypervirulent K. penumoniae amongst the KP isolates is 10.3% in blood streamed infection patients which is in concordance with other studies
- Continuous surveillance is necessary in order to detect any potential outbreak of hv K. pneumoniae,as well as to study the outcome in more detail so as to institute proper therapeutic stratergies & appropriate infection control measures

OP - 09

Spectrum of Bacterial Infection in Paediatric Cancer Patients and Antimicrobial Susceptibility Patterns in a Tertiary Care Hospital

Dr. Shubhashree Acharya

INTRODUCTION

Bacterial infections in paediatric cancer patients present a significant clinical challenge due to weakened immune systems. These infections can lead toprolonged hospital stays and complications.

AIM

1.To determine the etiological agents of different bacterial infections in pediatric cancer patients.

2.To obtain antimicrobial susceptibilitypattern of the isolates in the patients of pediatric cancer.

MATERIALS AND METHODS

This cross-sectional study was conducted over a period of 18-month. Paediatric cancer patients presenting with febrile episodes were included. Clinical samples, including blood, urine, and respiratory secretions, were collected and processed using standard microbiological techniques. Bacterial isolates were identified and antimicrobial susceptibility testing was performed using the Kirby-Bauer disk diffusion method.

RESULTS

A total of 79 samples were collected from paediatric cancer patients with febrile episodes. Majority of isolates were from acute lymphoblastic leukaemia patients with blood stream infection(56%) followed by urinary tract infection(13%). Gram-positive bacteria (57.6%), with Staphylococcus aureus(42%) being the most common, followed by Enterococcus species(15%). Gram-negative bacteria accounted for 12% of isolates, with Klebsiella pneumoniae (19%)and Escherichia coli (7.6%)being the predominant species. Out of all gram-positive organisms isolated significant proportion of isolates exhibited multidrug resistance(65%).Majority of isolatesexhibited resistance tofluoroquinolones followed by cephalosporins.

DISCUSSION

A study by Schöninget alrevealed higher number of gram-positive blood stream infection (65%) in acute lymphoblastic leukaemia, which is similar to our study. Another study,sandovalet alrevealed urinary tract infections (8.6%) of infection which is almost similar with our study(13%).

CONCLUSION

The findings emphasize need for infection control measures and antimicrobial stewardship programs to manage resistant infections, particularly those caused by gram-positive organisms, thereby improving clinical outcomes.

Department of Microbiology, PRM Medical College & Hospital, Baripada

OP - 10

Bacteriological profile of ventilator associated pneumonia (VAP) among stroke patients in a tertiary care hospital

Dr. Smrutisree Mohapatra

BACKGROUND:

Ventilator associated pneumonia (VAP) is defined as pneumonia that develops in patients after 48 hours of mechanical ventilation. VAP is an important subtype of hospital acquired pneumonia (HAP). In India, incidence of VAP among mechanically ventilated patients in Neurosurgery ICU is about 29%.VAP is an important respiratory complication among stroke patients in Neurosurgery ICU.

OBJECTIVES:

1. To estimate the prevalence of VAP in the Neurosurgical ICU among stroke patients.
2. To know the bacterial pathogens causing VAP in the Neurosurgery ICU among stroke patients and their antibiotic susceptibility profile.

MATERIALS AND METHODS:

A prospective longitudinal study was carried out at KIMS, Bhubaneswar, from 1st September 2022 to 31st May 2024. This study included stroke patients admitted to Neurosurgery ICU who developed VAP.The demographic, clinical and microbiological data was collected in the case report proforma.VAP was diagnosed on the basis of CPIS scoring system and a score > 6 was diagnostic. Microbiological processing of respiratory samples done as per standard operating procedures.

RESULTS:

A total of 817 stroke patients were admitted to Neurosurgery ICU, out of which 47 were diagnosed as VAP (CPIS scoring system), prevalence being 5.75%. Majority were in the age group of 41-60 years(51%) and 72% were males. Early onset VAP developed in 24 patients (51%) and late onset VAP was seen in 23 patients(49%). The microbiological criteria were fulfilled in 41 patients and a total of 49 isolates were obtained (culture positivity being 87%).The most organism isolated from early onset & late onset VAP wasAcinetobacter baumannii&Klebsiella pneumoniae respectively.Klebsiella pneumoniaewas most susceptible to Tigecycline (75%), followed by Gentamicin (50%). Acinetobacter baumannii wasmost susceptible to Tigecycline (67%) and Co- trimoxazole (42%). These pathogens were resistant to most of the commonly used antibiotics (3rd generation Cephalosporins and Carbapenems). The in-hospital mortality rate was 25.53% and the most common risk factor for developing VAP among stroke patients was hypertension followed by previous H/O COVID 19. The association of GCS (poor or good) and immediate cause of stroke (RTA/ Non-RTA) with development of early and late onset VAP was found to be statistically significant ($p<0.05$).

DISCUSSION AND CONCLUSION:

Most common GNB isolated from VAP in our study was Klebsiella pneumoniae; 20 (40.81%), which is close to the findings of Cheema et al (2018) where Klebsiella pneumoniae was also the predominant bacterial isolate (37%).In our study, prevalence of VAP among stroke patients in neurosurgery ICU was 5.75%, which was close to the findings by Kasuya Y et al in 2011 (6.44%). This study finding will strengthen the ongoing hospital infection and antibiotic stewardship efforts and peer learning processes.

Department of Microbiology, PRM Medical College & Hospital, Baripada

FREE PAPER

OP - 11

Bacteriological profile of Diabetic Foot Ulcer in Southern part of Odisha

Dr. Sephali Agarwal

INTRODUCTION

Diabetic foot ulcer (DFU) is an open sore wound that occurs in approximately 6.3% of patients with Diabetes mellittusglobally. Because of high incidence and the associated mortality and morbidity are the most common reasons for hospitalization of diabetes patients.

OBJECTIVE

- To identify the microbiological profile and antibiotic sensitivity patterns of causative agents.
- To assess probable risk factors contributing to infection of ulcers that harbour multidrug-resistant organisms and their outcomes.

MATERIAL METHOD

A cross-sectional study was conducted in the department of microbiology MKCG MCH from 2022-2024. Pus samples were collected from all patients having Diabetes foot ulcerhospitalized in department of surgery and were subjected to direct staining, bacterial culture and antibiotic sensitivity testing as per the standard procedures and biofilm production using congo red method were done. Among resistance pattern further genotypic testing were done.

RESULT

165 pus samples were processed, 206 bacteria isolated with aerobic - 90.7% and anaerobic - 9.22%. 40-60years age group maximally affected-43.6%, with Male predominance - 72.7% Monomicrobial infection was 46.06%% and polymicrobial 37.5%. Among aerobic Gram negative bacilli were more prevalent 82.8% than gram positive cocci 18.7%. Among anaerobes bacteroides were maximally isolated.Biofilm production were seen among 24.7% isolates.Among gram negative 36.6% were ESBL producers,7.7% AmpC producers, 32.2% carbapenemase producer. MRSA isolates were 63.6%. Genotypic study was conducted on Pseudomonas sppfor ESBL and Carbapenemase as it showed maximum resistant.

DISCUSSION

Priti shah et al andSudhir k. jain et al study were concordant with our study in Age, sex, monomicrobial isolate predominant, Anaerobic organism around 15%, Pseudomonas sppwere maximally affected, ESBL - 42%, MRSA- 77%.

Department of Microbiology, PRM Medical College & Hospital, Baripada

CONCLUSION

The data obtained from this study will be valuable in aiding future empirical treatment guidelines in the treatment of DFUs. There is a need for continuous surveillanceas increasing rate of multidrug resistant organism.

OP - 12

Study on Phenotypic Detection of Virulence Markers Among Candida Species Isolated from Clinical Specimens

Dr. Adyasha Mohanty

INTRODUCTION:

Candidiasishasemerged as an alarming opportunistic infectionamong immunocompromised patients. Prolonged use of antibioticsand chemotherapeutic agents has attributed to emergence of drug-resistant Candidaspecies. Pathogenicity ofCandidais enhanced by several virulence factorslike- hydrolytic enzymes, andbiofilm formation.

OBJECTIVES

Isolation and identification of different Candida species from various clinical specimens, Detection of the virulence factors and their antifungal susceptibility testing(AFST).

METHODS

A1yearcross-sectional study was carried out from June 2023 to May 2024. All yeast and yeast like colonies isolated in routine culture of different clinical specimens in the Department of Microbiology were processed for phenotypic identification of Candida. Furtherspecies level identification was done by- Germ tube test, CHROM agar and Dalmau plate method.Isolates weresubjected to AFSTon MHAMB(Muller Hinton Agar with 2% Methylene blue). Virulence factorslikebiofilm formation, phospholipase, proteinaseand lipaseof all Candidaisolates were detected.

RESULT:

Among 180Candida species isolated- Majority were from Urine(122) andBlood(36). Predominantspecieswas C. albicans(52%) followed by C. tropicalis(30%)and C. krusei (18%).The majorvirulence factor detected was proteinase activity(68%) followed by Lipase(62%) and Phospholipase(52%). C.tropicaliswasthe highestBiofilm producer(14% of C.tropicalis produced Biofilm). MostCandidaspecies were Itraconazole sensitive(92%).

DISCUSSION

Jose etal.(2015) found C.albicansto be the most frequently isolated yeast, with C.tropicalis being

the highest biofilm producer, similar to our study. They alsoreported, 75% ofCandida produced proteinase and 50% produced phospholipase. Jasim etal.(2016)observed 64% of Candida were lipase producers, with mostCandidabeing sensitive to itraconazole.

CONCLUSION:

Rapid identificationand speciation of Candida,along with their AFST patterns, guide appropriate antifungal therapy. Detection ofvirulence factors indicates potential invasiveness of the fungi.

OP - 13

Identification of *Candida* spp. and the virulence factors phenotypically and genotypically with antifungal susceptibility pattern in vulvovaginitis cases visiting the tertiary care hospital.

Dr. Chinmayee Panda

INTRODUCTION-

Vulvovaginal candidiasis (VVC) remains one the most common female genital tractinfections.Candida albicansis the most commonly isolated species in 85%-90% ofVVC cases.However,there has been a notable shift in causative agent as non-albicans candida species (NAC) gaining prominence.Therefore correct identification of candida species is essential for the antifungaltherapy.

OBJECTIVE-

This study was conducted to identify the spectrum of Candida species using different phenotypic methods and determine their antifungal susceptibility pattern along with their capability of virulence factors production.

METHODS-

High-vaginal swabs(HVS) were collected from 100 clinically diagnosed VVC cases and 50 asymptomatic control group.They were subjected to gram's stain,KOH mount and culture on Sabouraud dextrose agar.Species identification was done by germ tube test,CHROMagar inoculation,Dalmau-plate method using corn meal-tween-80 medium,sugar fermentation and sugar assimilation method phenotypically.Antifungal susceptibility test was done by disc diffusion and micro-broth dilution method.Detection of virulence factors such as haemolytic activity, biofilm production, proteinase, phospholipase and esterase activity were done by standard methods.Molecular detection of virulence genes are undergoing.Statistical analysis was done further.

RESULT-

HVSyielded growth of Candida spp. in 26.2% cases and in 20% control group.Among cases Candida albicans were isolated in27.2% &NAC species accounts for 72.7%. In control group, Candida albicans

accounted for 50% and rest 50% were NAC spp. Among cases,resistance pattern of fluconazole is 40% and among controls it accounts for 10%. Biofilm production (75%)and esterase activity (72%) among cases were highest,whereas in control group, virulence factors were much lesser.

DISCUSSION AND CONCLUSION-

There is a clear noticeable increase in prevalence of NAC species in VVC cases. Various pathogenic mechanisms by above virulence factors of NAC make them poor responders to fluconazole,resulting treatment failure.Therefore definitive laboratory procedures are of paramount importance to identify candida species for effective use of antifungal agents.

OP - 14

Mycological Profile of Bronchoalveolar Lavage (Bal) Samples in Patients Hospitalised in Pulmonary Units in A Terciary Care Centre

Dr Sudeshna Singha

INTRODUCTION

Pulmonary fungal infections are being recognised with increasing frequency in recent years and associated with high mortality rate. As BAL fluid samples are useful specimen in the diagnosis of invasive pulmonary infections, the study was designed to evaluate the distribution of fungal elements in hospitalised patients in pulmonary unit by direct microscopy and culture of BAL samples.

AIM AND OBJECTIVE

To isolate and identify different fungal species in BAL samples of hospitalised patients in pulmonary unit.

MATERIALS AND METHODS

An observational study was performed with BAL samples collected from 1st June 2023 to 1st June 2024 in the Department of Microbiology, VIMSAR, BURLA., subjected to microscopic examination by KOH wet mount and culture on SDA media. The samples were processed and isolates identified by standard microbiological procedure.

RESULT

Out of 184 samples of BAL, 66(35.86%) samples showed fungal growth.Out of these Aspergillus fumigatus were isolated in 25 samples (37.87%), Candida species in 17 samples(25.75%), A niger in 13 samples (19.69%), A flavus in 07 samples (10.6%) and Rhizopus species in 04 samples (0.06%)

DISCUSSION

In this study 41 samples(62%) positive for both microscopy and culture and 25 samples(38%) positive

for only culture.

In this study A fumigatus were the most common fungi isolated followed by candida species. A niger, A flavus and few Rhizopus species were isolated.

CONCLUSION

Adequate measures need to be taken for the early identification and treatment of pulmonary fungal infections.These infections if diagnosed early can be treated effectively to prevent the progression of disease and hence mortality.

OP - 15

Study of Virulence Factors and Anti-fungal Susceptibility of Fungiisolated from Otomycosis Patients.

Dr Lalit Prakash Majhi

INTRODUCTION:

Otomycosis is a superficial, fungal infection of the external auditorycanal. Otomycosis sometimes necessitates long-term therapy and follow-up, which presents challenges for both patients and otolaryngologists.

AIM AND OBJECTIVE

1. Isolate fungalpathogens.
2. DemonstrateVirulence factors of isolates.
3. Anti-Fungal Susceptibility.

METHODOLOGY:

Suspected case of otomycosis attendingENT OPD were enrolled andexamined with otoscope for any debris suggestive of fungal infection. Samples from External auditory Canalwascollected and transported to the laboratory immediately for mycologicalexamination.

IDENTIFICATION :

Direct microscopic examination was done by 10 % KOH, Sampleinoculated on two SDA with chloramphenicol, incubated at 25°C and 37°C aerobically for a period of 4 weeks. Culture media was examined for presence of colonies every 3-4 days. Identification was done from colony morphology and LPCB mount microscopy and gram stain and germ tube examination.

Various virulence factorssuch as Biofilm formation, Lipaseproduction,?-amylase production, Phospholipase activity and Haemolysis activity was demonstrated.

AFST was done as per CLSI M60 document.

Results:Growth was found in 74.5% of cases. In which Male accounted for 53%, and females 47%of caseMost common fungi isolated was Aspergillus niger(54),Candida albicans(21) cases. ***Aspergillus niger***showed virulence, with high lipase, phospholipase, and ?-amylase production. Candida albicans demonstrated biofilm formation.

After doing AFST we could find that Itraconazoleshowed the highest resistance followed by Voriconazoleand Amphotericin B.

DISCUSSION

A study by Kaur et al. (2000) from North India showed most common isolates as Aspergillus niger and Candia albicans, which is similar to our studies and Prasad et al (2014) from south India also showed the similar findings as our studies.

CONCLUSION:

Otomycosis is common ear infection in our region.Habitual cleaning of ears with unsterile materials is the major predisposing factor.Aspergillus and Candida are the most common etiological agents of otomycosis.

OP - 16

Microbiological Profile of Chronic Suppurative Otitis Media(csom) in a Tertiary Care Centre

Dr. Subhashree Barala

INTRODUCTION:

Chronic suppurative otitis media(CSOM) is a notorious infection and major health problem in developing countries causing serious local damage and threatening complications. World-wide, it is estimated that 65-300 million people are affected by CSOM, with hearing impairment reported in about 60% of them. Early and effective treatment based on the knowledge of causative microorganisms and their antimicrobial sensitivity ensures prompt clinical recovery and possible complications can thus be avoided.

OBJECTIVE-

1. To study different microorganisms isolated from patients of CSOM attending the Ear, Nose & Throat department of IMS&SUM Hospital, BBSR. 2. To study the antimicrobial susceptibility pattern of isolates.

METHODS-

It's a hospital based cross-sectional study conducted over a period of 6 months. Ear swabs were

collected from 50 patients of CSOM and sent to microbiology laboratory for culture and antimicrobial susceptibility testing.

RESULT

Out of 50 ear swabs processed microbial growth seen in 45 samples. The peak incidence of CSOM observed in age group between 20 years and 40 years. Females were more commonly affected than males. The most common organisms isolated were Staphylococcus aureus (37.7%) and Pseudomonas aeruginosa (31.1%). Antimicrobial profile of isolates revealed maximum sensitivity to Gentamicin (76.2%), Amikacin (68.4%) and Linezolid (66.6%).

DISCUSSION

In our study Staphylococcus aureus was the leading cause of CSOM showed highest sensitivity to Vancomycin, Gentamicin, and Linezolid. Pseudomonas aeruginosa showed highest sensitivity to Amikacin, meropenem and Piperacillin/Tazobactam. Aspergillus niger was the predominantamong fungal isolates followed by Candida albicans. The indiscriminate, irrational and increased use of antimicrobial agents against the disease led to increase in the development of antimicrobial resistance.

CONCLUSION

Knowledge of the spectrum of microorganisms causing CSOM and their antimicrobial susceptibility pattern help clinicians for better management of the patients.

OP -17

Bacteriological Profile in Acute Exacerbation of COPD Patients Attending a Tertiary Care Hopsital in Southern Odisha

Dr. Rakesh

INTRODUCTION:

Chronic Obstructive Pulmonary Disease (COPD) is now one of the top three causes of death worldwide. Acute exacerbations are significant and frequent events in the natural history of COPD. Majority of these exacerbations are of infectious aetiology and bacteria account for 50-75% of cases. The prevalence of COPD is 10.7-12.1% globally and in India, it is ranged from 1.6-28.3%.

OBJECTIVES:

To determine the bacteriological profile causing acute exacerbations of COPD and their antibiotic susceptibility pattern.

METHODS:

A cross-sectional study was conducted over 18months. Direct Gram stain was done for all sputum samples followed by culture. Identification of organisms and their antimicrobial susceptibility testing was done by conventional microbiological techniques. Detection of IgM antibody for *Chlamydia pneumoniae* and *Mycoplasma pneumoniae* was done by ELISA.

Results:

The most common pathogens isolated were *Klebsiella pneumoniae* (15.55%), *Pseudomonas aeruginosa* (13.33%) and *Staphylococcus aureus* (10.37%). Detection of atypical bacteria was 21.4% in which *Mycoplasma pneumoniae* was 10.37% (culture - 5.18%, IgM ELISA- 8.14%) & *Chlamydia pneumoniae* was 11.11% (IgM ELISA). Gram-negative organisms were most sensitive to Cefepime (87%), Gentamycin (85%) and Levofloxacin (72.2%) while Gram-positive bacteria were more susceptible to Linezolid (100%) and Cotrimoxazole (85.7%). Smoking remained the significant risk factor (p value<0.05).

DISCUSSION:

Similar studies by **Neelama KAS** *et al* which revealed *Klebsiella pneumoniae* as the most common isolate. Detection of atypical bacterial pathogens was almost like **Messosus** *et al***.**

CONCLUSION:

Acute exacerbations of COPD were common in males of more than 50 years of age and mainly due to smoking habits. Gram negative bacteria were more frequently isolated and appropriate antimicrobial therapy should be started early depending on the antimicrobial sensitivity results to reduce MDR.

OP - 18

Prevalence of Viral Pathogens and Their Clinical Correlation Among Patients with Acute Respiratory Illness in a Tertiary Care Hospital

Dr Dipsa Routray

BACKGROUND

Respiratory tract infections are a major cause of morbidity and mortality worldwide. Association between acute respiratory illness (ARI) and different viral pathogens ranges between 40% – 90%. Similarly, co-infection of virus-virus and virus-bacteria occur in 15% - 30% of cases. Since new viruses are reported recently, there is an increased urgency to study the epidemiology of respiratory tract pathogens for facilitating planning, disease prevention and devising control strategies.

OBJECTIVES

1. To estimate the prevalence of viral pathogens in patients with ARI
2. To detect their co-infection with other respiratory pathogens
3. To study the outcome of these patients.

METHODS

Respiratory samples were collected from patients presenting with signs and symptoms of ARI. Two samples were collected *viz*. one in viral transport medium (VTM) for detection of viral pathogens by multiplex rt-PCR assay and other in sterile container for bacteriological processing. Data pertaining to ARI and the association with other pathogens were conducted following standard statistical methods and a p value of $p < 0.05$ was considered as significant.

RESULTS

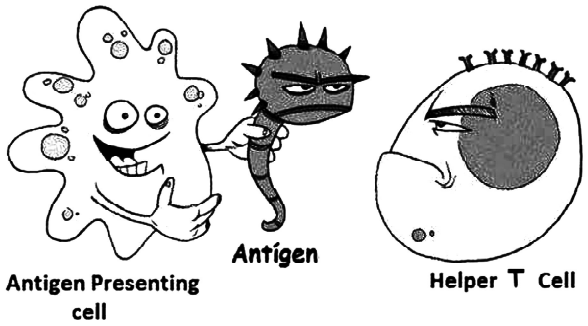
A total of 116 samples were processed, of which 51(44%) tested positive for bacterial and viral pathogens. Viral pathogens were prevalent in 12% patients followed by virus-bacteria co-infection in 6.8% and virus-virus co-infection in 0.86%. Adenovirus (23.5%) and corona virus (11.76%) were predominant in paediatric and adults respectively. Majority of ARI (65.2%) due to viral infection recovered without hospitalisation. However, mortality was seen in 4.34% cases.

DISCUSSION

- Viral pathogens were detected in 19.8% cases which is less than the study by Waghmode *et al*., 2021 (32.5%).
- Adenovirus (23.5%) was the predominant viral pathogen detected in this study, which is more than that reported by Bhardwaj *et al*., 2022 (0.7%).

CONCLUSION

Our study revealed viral pathogens causing ARI in 43% cases which suggests that use of antibiotics can be avoided in the first instance. This will help the clinicians for the proper management of patients.



OP - 19

Resurgence of Mumps Cases - Suspicion of Outbreak???

Dr. T Siwani

INTRODUCTION

Mumps is an acute infectious disease, transmitted through direct contact with respiratory droplets, fomites or saliva and is caused by Mumps Rubula virus. Infection may be asymptomatic or with non-specific or primarily respiratory symptoms, with or without parotitis. Atypical presentations or complications include epididymo-orchitis, oophoritis, nephritis, pancreatitis, meningitis, encephalitis etc. which are potentially life threatening. So, these cases require rapid and reliable diagnostic tests for prevention of morbidity and mortality.

OBJECTIVES:

To diagnose suspected Mumps cases by ELISA and study for a possible outbreak.

METHODS:

A prospective study conducted over a period of 6 months, where cases of parotitis with or without meningo-encephalitis were included. Along with patient's history 3-5ml blood was collected for serum and subjected to detect anti-Mumps IgM antibodies by ELISA and results were statistically analyzed.

RESULTS:

Among 31 clinically suspected cases, 26(83.87%) cases presented with parotitis and meningo-encephalitis while 5(16.13%) cases presented with only parotitis.

By ELISA, 23(74.20%) cases were found to be seropositive for anti-Mumps IgM antibodies, among which 19(73.03%) cases were having parotitis with meningo-encephalitis and 4(80%) cases were having only parotitis.

All positive cases were found to be unimmunized with mumps vaccine.

The presence of contact history is significant with (p= 0.00089) towards laboratory diagnosed mumps cases.

DISCUSSION:

In current study, 74.20% cases were found to be positive with anti-Mumps IgM antibodies. Male preponderance(85%) among the cases is seen which is similar to (75%)*Vandana et al*. study. All positive anti-Mumps IgM antibodies cases were unimmunized, is concordant with *Vaidya et al., Mishra et al.* study but discordant with the study of *Samuel et al*. where all were immunized.

CONCLUSION:

Non-inclusion of Mumps vaccine in Universal Immunization Program can be one of the reason for cluster cases and should be considered for possible outbreak as cyclical trend of Mumps occurs every 3-4years.

OP - 20

Antimicrobial Stewardship Awareness Among Doctors of a Tertiary Care Hospital in Eastern Odisha: A Cross Sectional Study

Dr. Aruna Rani Behera

INTRODUCTION:

The ease of availability of antimicrobials and their excessive use is a growing issue which has significantly contributed to antimicrobial resistance (AMR). This is a matter of concern for public health as the burden of AMR is far more than the research and development work done to develop new antimicrobials. India, being one of the top consumers of antimicrobials, is now facing this threat which can only be reduced through the implementation of antimicrobial stewardship program (AMSP).

OBJECTIVE:

This study aims to evaluate health professionals' perceptions regarding the level of implementation of the Antimicrobials Stewardship (AMS) programs in IMS & SUM hospital, at Phulnakhara, Bhubaneswar and to assess the perceived barriers to its implementation.

METHODS:

During this cross-sectional study, a total of 150-200 healthcare providers agreed to participate. The HCPs are physicians of different specialities at our hospital. The questionnaire is distributed in English via WhatsApp community groups that includes only the Health care Professionals (HCPs) in the hospital.

RESULTS:

Results from our study will be focussed on implementation of AMSP and its components will be consolidated and analysed accordingly. Gaps in implementation activities will be identified by highlighting the AMSP components.

CONCLUSION:

This study focuses mainly to encourage cautious use of available antibiotics by training the healthcare workers and creating awareness. There is lot of scope in improving the implementation activities by building and strengthening of components such as information technology in monitoring and surveillance, use of antibiotic cycling and sensitising staff and broadening the role of different staff members to develop an effective programme which meets the goals of National action plan -AMR.

OP - 21

Evaluating knowledge, attitudes, and hand hygiene practices among healthcare professionals in a recently established tertiary healthcare facility in Eastern India using a questionnaire-based study

Dr. Roshni Dandapat

INTRODUCTION

One of the major contributing factors that infections spread in hospitals is through the hands of healthcare personnel coming in contact with patients. According to a study,there are 136 million HAIs worldwide each year with China (52 million), Pakistan (10 million) and India (9 million) bearing the heaviest burden.Studies have indicated that health care workers (HCWs) have gaps in their knowledge about hand hygiene, despite the World Health Organization's (WHO) emphasis on the correlation between improved hand hygiene compliance and greater hand hygiene knowledge.

OBJECTIVE

To assess levels of knowledge, attitude and practice in various aspects of hand hygiene in HCWs including housekeeping for identifying gaps.

MATERIAL AND METHODS

A descriptive cross sectional comparative study is being conducted among nurses, doctors, technicians and housekeeping in IMS & SUM 2 from June, 2024 to September, 2024. A WHO "Hand Hygiene Knowledge Questionnaire" is being used for data collection among the HCWs distributed as a Google form in Whatsapp groups. Knowledge gaps are identified among the various groups and training on Hand hygiene is provided followed by post-test.The response to each question was examined using percentages.

RESULT

Results from our study will be consolidated and analysed.

CONCLUSION

This study stresses upon the growing need for prompt interventions at institutional level for addressing the gaps evident from the study.

Department of Microbiology, PRM Medical College & Hospital, Baripada

OP - 22

Assessment of Artificial Intelligence platforms with regard to medical Microbiology knowledge ; An analysis of chat GPT and Gemini

Dr. Monalisa Subudhi

INTRODUCTION:

Indynamic landscape of Microbiology, the transformative impact of artificial intelligence (AI) marks a revolutionary step, reshaping the fabric of medical education, research, diagnostic and treatment.AI andmachine learning (ML) toolsin medical education is used by bothteachers and students.Open AIplatforms like Chat GPT(GPT 3.5)and Gemini are large language model tools helping in various questionnaires, assessing a viable solution for different cases pertaining to medical education, devising new strategies and tools to improve medical education technology.

OBJECTIVE:

To know the utilisation of two artificial intelligence(AI) platforms, ChatGPT 3.5 (OpenAI,California, United-States)and Gemini(Google AI, California, United-States) in medical education.

MATERIAL & METHOD:

A comparative study over the performance of two artificial intelligence platforms Chat GPT3.5 and Gemini was assessed online by answering a questionnaire comprising of 200 multiple-choice questions of microbiology topics from general-microbiology, immunology,applied-microbiolgyto infectious disease, drawn from validated sources with answer key and cross-checked by the investigators.

RESULT:

The open AI platformshad comparable accuracy with correct response scores of 141(70.5%) and 142(71%). But their performance varied with Gemini performing better in general microbiology 36 (72%) and immunology 35(70%), whereas ChatGPT3.5 77(77%)in applied microbiology.Inthe General Microbiology,ImmunologyandApplied to Infectious Diseases section 58% (29 / 50), 56% (28 / 50), 59% (59/ 100) of questions were correctly answered while 24% (12/50), 18% (9/50), 12% (12/100) were wrong by both platforms respectively ($x2=16.082$, p-value=0.000061; $x2 = 5.9918$, pvalue = 0.014373; $x2 = 5.6895$, pvalue= 0.017066). Relationship between correct responses and the usage of ChatGPT 3.5 and Gemini were assessed and $Pd \leq 0.05$ value for tests were taken significant.

DISCUSSION &CONCLUSION

The amalgamation of AI and ML in microbiology announces a transformative era in the field of Microbiology with challenges and limitations, to address their full potential.

POSTERS

PO - 01

Sensitivity Pattern of Cefiderocol, an Upcoming Antibiotic to Carbapenem Resistant Acinetobacter *spp.* & Pseudomonas *spp.*

Dr Soumya Shubhadarshini Samal

INTRODUCTION-

At presentthe carbapenemresistant *Acinetobacter baumannii*(CRAB)and metallo-β-lactamase (MBL) producing carbapenemresistant *Pseudomonas aeruginosa*(CRPA)are important causes of infections in ICUs and they have limited treatment options like colistin. These are also increasingly becoming resistant to toxic colistin sparing regimens like β-lactam-β-lactamase inhibitorsceftazidime / avibactam(CZA) with or withoutaztreonam (AT) andceftolozane / tazobactam.Cefiderocol is a novel siderophobe cephalosporin conjugate and is likely to be a good treatment candidate for these organisms particularly *Acinetobacterbaumanii*.

OBJECTIVE:

To note the susceptibility pattern of clinically significant CRAB and CRPA strains isolated from ICUs of IMS and SUM Hospital to cefiderocolas well as of CRPA isolates to CZA and AT as well as note their synergy.

MATERIAL & METHODS:

The present study was conducted in IMS & SUM Hospital,where all the samples from ICU received in central lab and growing clinically significant *Acinetobacterbaumanii* and *Pseudomonas aeruginosa* during study period of 15 / 4 /2024 to 15 / 7 /2024 were subjected to carbapenem susceptibility testing using Vitek 2, Biomerieux. All the CRAB were subjected to cefiderocol and CRPA to cefiderocol, CZA, AT and CZA-AT synergy testing using disk diffusion method as per CLSI guideline 2024.Colistin micro broth dilution method was done to know the colistin susceptibility to CRAB and CRPA.

RESULT & DISCUSSION:

Among the total isolates studied,60.10% were CRPA and 89.9%were CRAB. CRAB was resistant to all antibiotics except minocycline (25.8%),cefoperazone-sulbactam(27.27%) and colistin(92.8%)were sensitive. CRPA was resistant to all antibiotics except tested. CZA was sensitive to CRPA in 59.3%cases & in AT 18.7% cases,synergy was present in 90.7% cases.All the isolates of CRPA and CRAB were sensitive to cefiderocol.

CONCLUSION:

There is rising CZA resistance in CRPA, probably due to porin channel mutation or over expression of β lactamase or enhance efflux activity, in these cases cefiderocol can be taken as a good treatment option.

PO - 02

Bacteriological Profile of Catheter Associated Urinary Tract Infection (Cauti) Among Patients in a Tertiary Care Hospital, Vimsar

Dr Siaryong Kalpana Aimol

INTRODUCTION

Among nosocomial infections catheter associated urinary infection (CAUTI) is one of the most common infection. According to the CDC, CAUTIsare defined as an UTI developing in a patient after two consecutive days of implantation of an indwelling urinary catheter.

AIM OF THE STUDY AND OBJECTIVE

To identify and isolates pathogens causing UTI in patients with indwelling catheter and to assess their antibiotic susceptibility pattern.

MATERIALS AND METHODS

A hospital based retrospective study was done from January to June 2024 at Microbiology department. A total of 462 samples were included in this study. Taking all aseptic precautions, the samples were received and processed under conventional microbiological procedure. Antibiotic susceptibility tests were determined by Kirby- Bauer's disc diffusion method.

RESULT

Total of 198 samples showed significant growth. The Gram-negative bacteria isolations were predominant with *Escherichia coli 60*(30.5%) followed by *Pseudomonas 21*(11%), *Klebsiella spp. 20*(10%), *Acinetobacter 12*(6%). Among Gram-positive Staphylococcus *aureus 42*(21.2%) followed by Enterococcus spp. 36 (18.1%). Minimum(2%) isolation was seen for Citrobacter spp. The prevalence of CAUTI was significantly higher in females(55.6%) compared with males(44.3%). Antibiotic susceptibility pattern of Escherichia coli shows predominantly sensitive to Meropenem 88.3%, Imipenem 71.6% and resistant to Ciprofloxacin, Pseudomonas were sensitive to PiperacillinTazobactam 90.4%, ceftazidime 76.1% and resistant to Gentamycin and Staphylococcus is 100% sensitive to Linezolid, vancomycin and resistant to penicillin.

CONCLUSION

Based on this study, the most common organism responsible for CAUTI is *Escherichia* coli followed by Pseudomonas and Staphylococcus.To avoid device associated infections, implementation of proper care bundles and continuous education to HCWs plays a key role in reducing the CAUTI rates, thereby decreasing the morbidity and hospital stay to the patients.

PO - 03

Case Report on Chromoblastomycosis

Dr Prajna Nayak

INTRODUCTION:

Chromoblastomycosis is a chronic, granulomatous, and slowly progressive localized fungal infection. It is characterized by the presence of dematiaceous fungi, leading to polymorphic, verrucous, crusted, or ulcerated lesions. These fungi are saprotrophic organisms widely found in soil, with the infection typically occurring through inoculation of phaeoid fungi, most frequently involving the lower extremities.

CASE PRESENTATION:

We report the case of a 61-year-old man who presented to the dermatology department with a 2x1 cm lesion on his leg, which had been present for one year. Initially misdiagnosed as lupus vulgaris, the patient was treated with anti-tuberculosis therapy (ATT) for six months, with no improvement. He revisited the dermatology department, presenting with a single, well-defined plaque measuring 7x6 cm on the medial and anterior aspect of the left lower leg, characterized by crusting and oozing. The lesion's upper border showed minimal regression, while the lower border indicated progression.

DIAGNOSTIC WORKUP:

A tissue sample was collected from the lesion, which was hard in nature. The tissue was crushed between two slides, and smears were prepared for Gram stain and Ziehl-Neelsen (ZN) stain. A KOH mount preparation was also done for fungal study. The Gram stain revealed no pus cells or bacteria, and the ZN stain showed no acid-fast bacilli. However, the KOH mount revealed brown-pigmented, round to polyhedral, thick-walled sclerotic bodies with horizontal and vertical septations.

A small piece of tissue was placed on Sabouraud Dextrose Agar (SDA) and incubated at both 25°C and 37°C. After two weeks, brown colonies with a grey, fluffy central part grew. These colonies were further processed for slide culture.

MICROSCOPIC EXAMINATION:

Lactophenol cotton blue (LPCB) mount of the culture showed terminal and lateral conidiophores with chains of nearly spherical conidia, forming compact heads. The organism was identified as fonsacea spp.

TREATMENT AND FOLLOW-UP:

The patient was subsequently treated with Itraconazole 200 mg twice daily. Follow-up after one month of treatment showed significant remission of the lesion.

PO - 04

Bacteriological Profile of Pleural Fluid Inempyema Thoracic in A Tertiary Care Center

Dr . Utkal Nayak

INTRODUCTION-

Accumulation of thick, purulent fluid within pleural space is known as empyema thoracic.Gram stain and Culture has for decades been the gold standard for detection of microorganisms in pleural fluid samples.

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 January 2024 to June 2024 at Department of Microbiology VIMSAR, Burla.Samples were collected using sterile syringe and were processed as per conventional microbiologicaltechnique. Antimicrobial susceptibility testing was done using Kirby-Bauer disc diffusion method.

RESULT

Among 54 pleural fluid samples cultured ,31 samples (57%) yielded significant growth. Among the bacterial isolates ,16 isolates were Pseudomonas species (52%), 07 isolates were Klebsiella species (22%), 5 isolates were Staphylococcus species (16%) and 3 isolates were Acinetobacter species.

Antimicrobial susceptibility result showed that, 86% of Pseudomonas were sensitive to Imipenem and 82% were sensitive to Piperacillin -tazobactam. Klebsiella species had a sensitivity of 85% to carbapenem and 82% to Piperacillin -tazobactam. Allgram-positive isolates were 100% sensitive to Vancomycin and Linezolid. Both the species of Pseudomonas and Klebsiella were more than 80% resistance to Ampicillin.

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. This study results need to be replicated in other tertiary care centres in order to give empirical treatment for cases of empyema.

PO - 05

Microbiological Profile & Antimicrobial Sensitivity Pattern o f Culture Isolates in Picu in A Tertiary Care Hospital.

Dr Sarada Priyadarshini

BACKGROUND:

PICU is predominantly concerned with the management of children with acutely life-threatening conditions in a specialized unit & caring for such critically ill children remains one of the most demanding & challenging aspect. Timely & adequately treatment of infections with appropriate antibiotics are essential to reduce global childhood mortality.So, with this background our study has the following objectives.

OBJECTIVE:

The objective of the study was to find out the etiological profile(bacteria &fungus)& antimicrobial sensitivity pattern of the pathogens isolated from PICU.

MATERIALS & METHODS:

Aretrospective observational study was conducted over a period of one year from June 2023-May 2024 in the department of Microbiology. All types of samples received from PICU duringthe study period were included. Demographic, clinical & microbiological data were collected from the patient information sheet & laboratory records. All the data wereentered into Microsoft excel spread sheet & analyzed by SPSS software. Microbiological processing was done as per the standard operating procedure. Identification & susceptibility was carried out by VITEK 2 automated system as per CLSI 2023-2024.

RESULT:

A total of 596 cultures were sent from PICU during the study period. Out of the total cultures, 143(23.9%) identified an organism.Maximum numbers of samples were received from age group 6-18 years299 (50.16%).The culturepositivity rate washigh in bloodsample55(38.4%)&urine 35(24.4%).Most common pathogens isolated from blood was*Klebsiella spp*. 20(35%),*E.coli* 17 (23.5%) &*S.aureus* (58.8%). *E.coli* 12 (70.5%)*Candida*spp. (41.6%) & *Enterococcus* spp.6 (85.7%) were isolated from urine samples.

Enterobacterales (37) isolates from blood cultureshowed highest susceptibility toTigecycline(90%) & Amikacin (75%), while those from urine(17) showed highest susceptibility to Fosfomycin & Nitrofurantoin (82% & 88% respectively). Staphylococcal isolates were susceptible to Linezolid (100%) & Vancomycin (92%).Candida isolates were 100% susceptible to Fluconazole & Amphotericin-B.

DISCUSSION &CONCLUSION:

The culture positivity rate of PICU during the study period was 23.9% which was similar to study conducted by *Chandrajyoti Bharat et al*. (19.35%). The most common pathogen isolated from PICU was *K.pneumoniae*, *E.coli*&*S.aureus*. Which was similar to*Hiremath Sagar et al*. (*S.aureus,Enterococcus*, *K. pneumoniae*&*A.baumannii*).

The present study has provided much needed information on the local antimicrobial profile of the prevailing pathogen causing pediatric infection in PICU. It will help to start early empirical therapy& to prevent progression of disease in PICU.

PO - 06

Burkholderia cepacia infection in a 45year old female with aspergilloma- A case report

Dr Gowri Thampy

INTRODUCTION

Burkholderia cepacia, an aerobic Gram-negative bacillus, commonly infects patients with cystic fibrosis (CF) and chronic granulomatous disease (CGD), rarely cause pneumonia in healthy individuals. Aspergilloma, a non-invasive Aspergillus infection, occurs when the fungus colonizes existing lung cavities from conditions like tuberculosis, sarcoidosis, or bronchiectasis. These cavities provide a favourable environment for Aspergillus growth, leading to aspergilloma.

To the best of our knowledge,this is the second case report of *Burkholderia cepacia* co-infection in a patient with aspergilloma, with the first reported in 2003 showing fatal pneumonia 9 months post-resection of aspergilloma.

CASE REPORT

A 45-year-old female with a past history of pulmonary tuberculosis presented with recurrent haemoptysis, productive cough, and right-side chest pain for a year. Diagnosed with a cavitating fungal lesion (aspergilloma) in the right upper lobe, and was advised excision. Her BAL sample showed *Burkholderia cepacia* sensitive to ceftazidime, meropenem, and cotrimoxazole, and *Aspergillus fumigatus* in fungal culture. Treated with antibiotics and antifungal agents, she underwent pulmonary segmentectomy and histopathology revealed an Aspergillus ball with inflammation, necrosis, angioinvasion, and presence of *Aspergillus*at resection margin.

DISCUSSION

In patients with pre-existing lung cavities,co-infection of *Burkholderia cepacia* and *Aspergillus* poses diagnostic and therapeutic challenges.Management involves combination of appropriate antibiotics and antifungal agents tailored to sensitivity patterns.Surgical intervention may be necessary in cases refractory to medical therapy.

CONCLUSION:

This case highlights the rare occurrence of *Burkholderia cepacia* complicating aspergilloma, emphasizing the importance of comprehensive diagnostic evaluation and multidisciplinary management strategies for such complex infections.

PO - 07

Bacteriological profile and Antibiogram of Endotracheal aspiration in a tertiary care hospital of Western Odisha

Dr. Nirlipta Nayak

INTRODUCTION

- Healthcare associated pneumonia is the second most common nosocomial infection worldwide and accounts for 15-20% of the total hospital acquired infections.It is the primary cause of death in ICU.
- Endotracheal intubation is one of the most important procedure done in the ICUs which in turn is a major risk factor in causing iatrogenic infections to patients,which leads to an increase in the morbidity and mortality.

AIM AND OBJECTIVE

- To study bacterial isolates from endotracheal aspirations of intubated patients.
- To study the antimicrobial susceptibility pattern of bacterial isolates of intubated patients.

MATERIALS AND METHODS

- The study was conducted from January 2024 to June 2024.Out of 42 tracheal aspirations received in the microbiology department from ICU patients,33 samples showed organism growth.
- All the samples were subjected to microscopy and aerobic culture.Isolates were identified by standard biochemical tests of organism and its antimicrobial susceptibility testing was done by Kirby Bauer disc diffusion method as per CLSI guidelines.

RESULTS

- Maximum number of isolates in Gram negative bacilli were Escherichia coli(36.34%) followed by Pseudomonas aeruginosa (27.25%) and Klebsiella pneumoniae(21.23%)
- Isolates in Gram positive cocci were Coagulase negative Staphylococci(6.06%) followed by Staphylococcus aureus(9.07%).
- In our study,maximum number of isolates of Gram negative bacilli(Escherichia coli) were sensitive to Imipenem(72.54%)followed by Piperacillin tazobactam(63.47%)and were resistant to Ampicillin(98.6%). Pseudomonas aeruginosa showed maximum percentage of sensitivity towards Imipenem(69.27%).The maximum number of isolates of Gram positive cocci(Staphylococcus aureus) were sensitive to Linezolid (93.5%)and resistant to penicillin(28.75%)

DISCUSSION AND CONCLUSION:

Respiratory tract infections in ICUs are the most important and the leading cause of morbidity and mortality. Patients with endotracheal tubes are susceptible to infection and therefore it is important to be aware of risk factors and responsible organism to take prompt action. Inappropriate and inadequate antibiotic treatment causes emergence of drug resistance in pathogens and poor prognosis in patients. Hence the isolation and antimicrobial susceptibility testing of the microorganism is necessary for their effective management.

PO - 08

Importance of Stool Microscopy and Culture in Diagnosing Disseminated Intra-Abdominal Tuberculosis in a Hepatitis B positive patient: A Case Report

Dr Swayam Swastik Sahoo

BACKGROUND & OBJECTIVE:

Diagnosis of intra-abdominal tuberculosis (TB) still poses a challenge due to the lack of rapid and reliable techniques to detect TB bacilli in specimens such as stool and owing to its paucibacillary nature. Microscopy and culture remain neglected yet useful tools for detecting disseminated TB in the stool. We hereby present a unique case report of disseminated TB in a hepatitis B-positive patient diagnosed with stool microscopy.

CASE REPORT:

A 44-year-old hepatitis B-positive patient presented with intermittent fever and weight loss. Radiological CT findings revealed multiple necrotic mesenteric, IC lymph nodes and multiple centrilobular in bud nodules in bilateral lungs suggestive of extrapulmonary TB. Ileo-colonoscopy showed terminal Ileo-colonic inflammation and punched-out lesions pointing towards Intestinal TB. The stool sample was sent for further investigation, showing acid-fast bacilli in ZN staining. The sample was sent to the Intermediate reference laboratory, where it was subjected to Line probe assay and liquid culture. BAL and sputum samples were also sent, and both samples came positive for acid-fast bacilli. The sample was sensitive to first-line TB drugs following anti-tubercular therapy was started. The patient responded well to the therapy and was recovering slowly afterwards.

CONCLUSION:

This rare case report on disseminated TB with hepatitis B coinfection highlights the importance of stool microscopy and culture, which is often a neglected specimen for TB bacilli detection. Overall, managing those patients requires a multidisciplinary approach to balance effective TB treatment while minimising the risk of drug-induced liver injury and careful diagnostic evaluation to avoid misdiagnosis.

PO - 09

Seroprevalence of Scrub typhus among pyrexia of unknown origin patients: A study from tertiary care hospital, Odisha

Dr Deba Prasad Mishra

INTRODUCTION

Scrub typhus is a rickettsial infection which is caused by *Orientia tsutsugamushi* that belongs to family of Rickettsiaceae. Scrub typhus is transmitted by the bite of the chigger of a mite. It is an acute febrile illness with rash, headache, nausea, abdominal pain, thrombocytopenia etc and delay in diagnosis is associated with considerable morbidity and mortality.

OBJECTIVE

To assess the seroprevalence of scrub typhus among the pyrexia of unknown cases in Hi Tech Medical College and Hospital, Bhubaneswar, Odisha.

Methods

This is a cross-sectional study in which serum samples were obtained from clinical cases of pyrexia of unknown origin from the period January 2024 to June 2024. Samples were processed for detection of dengue fever, typhoid fever, malaria, leptospirosis which are other causes of febrile illness in this area and excluded once they were detected positive. Detection of Scrub typhus antibody was done on the samples by ICT (Immunochromatography test) and IgM ELISA (Enzyme-linked immunosorbent assay).

RESULTS

Total number of samples processed were 250 of which 73 samples were positive for Scrub typhus by IgM ELISA 73(29.2%) and ICT 72(28.8%). Most common age group affected was 31 – 40 years (28.7%). Pathognomonic feature such as eschar (1.36%) was seen in one patient only. There was good correlation (98.6%) between ICT and ELISA in the present study.

DISCUSSION

Fever with chills and rigor (100%) was most common symptoms in this study which was similar to the study done by Tiwari *et al*., 2020. There was good correlation (98.6%) between ICT and ELISA in the present study which correlated with study done by Ramyasree *et al.,* 2015.

CONCLUSION

Scrub typhus has emerged as an important cause of acute febrile illness. It should be included in the differential diagnosis of fever of unknown origin along with malaria, dengue, typhoid, leptospirosis. Among the diagnostic technique for scrub typhus ELISA based system is helpful for detection of IgM antibodies because it is a simple, rapid and economical test.

PO - 10

A Comparative Study of Serological test RPR & TPHA for diagnosis of Syphilis in PLHIV patients at a tertiary care hospital.

Dr Soumya Mohanty

INTRODUCTION:

HIV and syphilis co-infection is complex and diagnosis is more difficult among PLHIV. Vulnerable groups in both HIV & syphilis are same such as MSM,sexworkers,truckdrivers,prisoners etc. Co-infection faces higher risk of treatment failure.

OBJECTIVES-

- To determine the prevalence of syphilis in PLHIV who attended ICTC clinic at SCB MCH, Cuttack.
- To determine diagnostic performance of TPHA and RPR test to detect syphilis in PLHIV.

METHODS-

A cross-sectional study was carried out from Nov 2023-June 2024 at SCB MCH,Cuttack. Syphilis test was carried out among HIV reactive cases after obtaining consent. Following the reverse algorithm for syphilis,treponemal test(TPHA) was carried out followed by a non-treponemal test(RPR-only for TPHA positive cases) for titre evaluation.

RESULTS:

Out of 6751 high risk cases,248[3.67%] were reactive for HIV. Among PLHIV, only 225 patients gave consent for syphilis test. 32[14.2%] of 225 PLHIV tested positive for syphilis. Co-infection was more in males[14,43.7%] followed by TG[10,31.2%] and females[8,25%]. Co-infection was more in age group of 31-40yrs[13,40.6%] followed by 21-30yrs[10,31.2%]. Both RPR and TPHA were reactive in 21[65.6%] patients whereas TPHA positive/RPR negative in 11[34.4%] patients. A titre of 1:2 was seen in 7[33.3%] cases followed by 1:8[5,23.8%],1:64[3,14.2%],1:32[2,9.52%], 1:16[2,9.52%],1:4[2,9.52%].

DISCUSSION:

In our study, co-infection was seen in 14.2% cases which correlated with studies of Figen et al,Rong-Xiang Weng et al. Maximum co-infection was seen in males of age 31-40yrs(40.6%) similar to a study by Sharma et al,Bourouache et al. Both TPHA/RPR positivity were seen in 65.6%cases which was quite low compared to study by Aydin et al(99.2%). RPR titre of 1:2 was prevalent in our study(33.3%) similar to Aydin et al(33.6%).

CONCLUSION:

Infection rates were higher among men compared to TG and females. Young individuals should be informed about STIs, their effects and preventive ways. It is of great significance to strengthen monitoring and treatment of syphilis in PLHIV to lower transmission rates and avoid complications seen in later stages of the disease.

In the field of observation,
chance favours only the prepared mind.
- Louis Pasteur

PO - 11

Cross - sectional Study on The Prevalence of *Mycobacterium Tuberculosis Causing* Lymphadenitis in a Tertiary Care Centre in Southern Odisha

Dr Aswini Kumar Sahu

INTRODUCTION:

Lymphadenitis is characterized by tender and sometimes painful swelling of lymph nodes. It is often associated withinfectious etiology(bacterial, viral, parasitic, and fungal), with tuberculosis accounting for 20-40% of cases. Lymphadenitis represents 5% of TB cases, with the cervical group affected in two-thirds of instances.E xtrapulmonary TB accounts for about 16% of all TB cases, with tuberculous lymphadenitis (TBLN) being the most frequent form.

OBJECTIVE

Tostudy the prevalence of*Mycobacterium tuberculosis*causing lymphadenitis.

METHODS:

Aone-year-long cross-sectional study was conducted in theDepartment ofMicrobiologyin collaboration with Pathology Departmentat MKCG MCH, Berhampur. Lymphatic aspirates were collected aseptically via fine needle aspiration using a 22 gauge needle with a 10 mm syringe from patients with clinically diagnosed lymphadenitis. All the samples were subjected to ZN staining, culture inLöwenstein-Jensen media, and detection by CBNAAT. Patients of all ages attending the OPD and IPD were included, except those on anti-tubercular therapy orthose suspected of havingmalignancy.

RESULT:

In a cross-sectional study of one year's duration, 172 clinically diagnosed lymphadenitis cases (ages 1-60) were found to have a*Mycobacterium tuberculosis*prevalence of 19.2%. Acid-fast bacilli were seen in 9.3% of cases in ZN stain, while 14.5% were positive in LJ media.By CBNAAT, 19.2% of cases could be identified.

DISCUSSION:

Yenilmez*et al*.(2024) observed a prevalence of*Mycobacterium tuberculosis*at 53.7%. Gautam*etal*.(2018) observed a prevalence of 25.7%. Similarly, in our study, the prevalence was found to be 19.2%.

CONCLUSION:

Using clinical, radiological, and microbiological methods for early diagnosis can reduce misdiagnosis and treatment delays, especially in non-pulmonary cases, supporting the National Tuberculosis EliminationProgramme's goals for EPTB.

PO - 12

Bacterial Profile and Antimicrobial Susceptibility Pattern of Adult Septicaemia in a Tertiary Care Hospital in Western Odisha

Dr. Pintu kumar

INTRODUCTION

Bacteraemia and bloodstream infections cause significant morbidity and mortality among hospitalized patients worldwide. Blood culture is the most reliable procedure for bacterial isolation.

OBJECTIVES

To determine bacterial profile of adult Septicaemia and their antibiogram.

METHODS

70 Adult patients were included in this study suspected to have septicemia. The blood samples were collected aseptically and were processed as per standard laboratory protocol. Identification of the organisms were done upto species level with standard biochemical tests.antibiotic susceptibility testing was done by Kirby Bauer Disc diffusion method according to CLSI guidelines 2024.

RESULTS

Out of 70 blood sample processed, 25(36%) showed bacterial growth. Among 25 positive isolates, 15(60%) were gram positive cocci and 10(40%) were gram negative bacilli.

Most common isolates were Staphyllococcusaureus(MRSA)-35% , Klebsiella species.(20%) S.aureus(MSSA)(15%) , Coagulase negative Staphylococcus-(10%), Pseudomonas spp.(10%,) Acinetobacter spp.(8%), Enterococcus spp.(2%).

Gram positive cocci(S.aureus) were most sensitive to Vancomycin 10(66%) and Linezolid 10(66%) and where as Gram negative bacilli(klebsiella spp.) were most sensitive to Meropenem 5(50%) and Ciprofloxacin 5(50%).

DISCUSSION

The isolation rate of this study is comparable with the rates reported from some other studies where routine blood culture was performed .

CONCLUSION:-

The present study provides much needed information on the prevalence of bacterial pathogens in bloodstream infection. It helps to know the bacteriological patterns to draft local antibiotic policy.

PO - 13

Streptococcus pneumoniae bacteremia in pediatric patients: A report of three

Dr Isha Kumar Khobragade

INTRODUCTION:

Streptococcus pneumoniae a colonizer of nasopharynx, known to cause pneumonia, meningitis, sinusitis and otitismedia in children and any break in mucosal barrier may lead to asymptomatic bacteremia. In children with fever and URTI, 5% have bacteremia with *S. pneumoniae* without any obvious focus and that resolves spontaneously. However, it may contribute to significant morbidity and mortality in extremes of age (<2/>65). Pathogen recovery from blood culture confirms diagnosis and optimizes antimicrobial therapy, preventing secondary complications. We report three cases of *S.pneumoniae* bacteremia in pediatric age highlighting their diverse presentation without any obvious focus.

METHODS:

S.pneumoniae were identified from blood cultures by VITEK 2 system and antibacterial susceptibility following current CLSI.

CASE DETAILS:

Case 1: Boy (13yrs), presented with cough and fever for 5 days, improved with empirical regimen of amoxyclav.

Case 2: Girl (9 month), known case of neonatal cholestasis presented with jaundice, abdominal distention, improved with supportive and nutritional supplements. **Case 3:** Girl (9yrs), known case of frequently relapsing nephrotic syndrome, presented with vomiting, diarrhoea and abdominal pain for 1 day, managed with stress-dose steroids and empirical parenteral antibiotics for suspected sepsis and switched to oral antibiotics after blood culture.

Blood culture for the above cases were sent routinely without obvious focus and all three isolates of *S.pneumoniae* were susceptible to Vancomycin and Linezolid, and resistant to Penicillin, Cotrimoxazole, macrolide and fluoroquinolone.

DISCUSSION:

S.pneumoniae has been reported for accounting to BSI in 4.8 % children. Our first case was simply URTI with fever and remaining two had co morbidity but no focus of infection or toxicity.

CONCLUSION:

Although rare, *S.pneumoniae* bacteremia in pediatric patients can have varied presentation. Thus, blood culture to be considered as important aspect of general pediatric practice and reevaluation of clinical status for any new focus of infection is essential with proven pneumococcal bacteremia.

Department of Microbiology, PRM Medical College & Hospital, Baripada

PO - 14

Microbiological Profile of Urinary Tract Infection in Patients With Type 2 Diabetes Mellitus - A Retrospective Hospital Based Cross-Sectional Study

Dr Swadhin Choudhury1

INTRODUCTION

Urinary tract infection (UTI) is a collective term that describes infection involving any part of the urinary tract. Type 2 diabetes mellitus is considered as a risk factor for developing UTI

The etiology &antibiotic resistance of the Uropathogens have been changing over the past yearsboth in community and hospital settings

AIMS & OBJECTIVES

1.To determine the prevalence & Microbial profile of Urinary Tract infection among adult patients with Type-II DM.

METHODOLOGY

A retrospective study was undertaken in the Department Microbiology of a Tertiary Care Hospital for a period of 6 months [July-2023 to December 2023]. Urine samples from adult (>18years) with Type-II DM were included in the study. Urine specimens received in the Microbiology Laboratory were processed for culture & sensitivity using standard guidelines. ID & AST of the isolated organisms were done with automated Vitek-2 system. Clinical and demographic data of patients were collected from hospital records. Analysis of the data was done by SPSS.

RESULT

Total urine sample received during the study period was 1297 out which growth positivity was 498 (38.39%). Among the 498 growth positive urine samples, 102 (20.48%) were with Type 2 DM.Prevalence of UTI among Diabetic patients was 7.86%. Average age of the diabetic patients were 49.01years (range 18-89 years), both sexes were equally affected, mean HbA1c level was 8.04%, majority (51.96%) were located in ICU. Predominantly isolated organism from urine were *Escherichia coli* (40.19%) followed by *Klebsiella* spp (18.62%)&*Enterococcus* spp (10.78%). Organisms isolated from ICU urine samples were predominantly*Klebsiella pneumoniae* (63.15%)followed by*Candida* spp (22.54%). *Escherichia coli* (48.78%) & *Enterococus* spp (10%) were commonly isolated from Ward & outpatients respectively. Gram negative

uropathogens were mostly sensitive to Fosfomycin (94.38%) followed Amikacin (75.28%). Most sensitive antimicrobials for Gram positive organism were Linezolid (100%) followed by Tiecoplanin (93.1%). Fluconazole was the most effective antifungal agent.

CONCLUSION

Prevalence of UTI in our study among Diabetic patients was 7.86%. Most common organism causing UTI was Escherichia coli. Urine of diabetic patients admitted in ICU had highest isolation rate &*Klebsiella pneumoniae* is the predominant pathogen. Effective antimicrobials for Gram negative pathogens was Fosfomycin, gram positive organism was Linezolid & Fluconazole for *Candida* spp.

REFERENCES

1. Tan CW, Chlebicki MP. Urinary tract infections in adults. Singapore Med J. 2016 Sep;57(9):485-90. doi: 10.11622/smedj.2016153. PMID: 27662890; PMCID: PMC5027397.
2. Shill MC, Huda NH, Moain FB, Karmakar UK. Prevalence of uropathogens in diabetic patients and their corresponding resistance pattern: results of a survey conducted at diagnostic centers in Dhaka, Bangladesh. Oman medical journal. 2010 Oct;25(4):282.
3. Aswani SM, Chandrashekar UK, Shivashankara KN, Pruthvi BC. Clinical profile of urinary tract infections in diabetics and non-diabetics. AMJ 2014, 7, 1,29-34. http//dx.doi.org/10.4066/AMJ.2014.1906

PO - 15

Incidence of catheter associated urinary tract infections in medicine ICU in a tertiary care centre of eastern Odisha

Dr Manaswini Patro

INTRODUCTION

Catheter associated urinary tract infection(CAUTI) is the leading cause of hospital acquired infections with an incidence of around 1.4- 1.7/1000 catheter days in hospitalized patients. CAUTI is the second most common cause of nosocomial bloodstream infection with around 15-25% mortality. However, it is commonly underdiagnosed in critically ill patients. Existence on multiple organ supports, decreased immunity and inability to communicate makes it difficult to differentiate asymptomatic bacteriuria from CAUTI in patients admitted in ICU settings.

OBJECTIVE

To determine the prevalence of catheter associated UTI, the spectrum of etiological agents, antibiotic sensitivity profile of bacterial pathogens among patients admitted to medicine ICU

METHODS

A prospective study of three months was conducted on patients admitted to medicine ICU, who were on urethral indwelling catheters for >48 hours. Urine specimens were collected aseptically in sterile containers and processed as per standard protocols. Microorganisms were isolated, identified and subjected to antibiotic susceptibility testing.

RESULTS

Out of 70 urine specimens, 10 bacterial isolates and 3*candida* species were recovered. Gram positives and gram negatives contributed to 3(15.38%) and 8 (61.53%) respectively. *Pseudomonas aeruginosa* (30.76%) was the most common pathogen isolated followed by *Escherichia coli* (23.07%) and *candida*species (23.07%). It was observed that all gram negative isolates were resistant to ampicillin while aztreonam was the most effective amongst antibiotics tested(87.5%). Males (61.53%) were commonly involved and 25-64 years age group (61.53%) were affected more in this study.

DISCUSSION

The prevalence of bacteriuria was higher (76.92%) than the study of Bizuayehu *et al*.(57.25%). The prevalence of bacteriuria/candiduria was highest (61.53%) in the age group of 25-64years, concordant to Bizuayehu *et al*.

Pseudomonas aeroginosa was the predominant pathogen in my study(5.7%) which is inconsistent with *Parihar* et al. where *Escherichia coli*(6%)was the commonest.

CONCLUSION

This study suggests urine culture and sensitivity should be done among the catheterized patients on regular basis. Unnecessary urethral catheterization should be avoided.

Keywords: catheter, *pseudomonas aeroginosa*

Use you hands to make some
Bubbles to kill those Troubles... !!
WASH YOU HANDS.

PO - 16

Spectrum of Organisms Responsible for Neonatal Sepsis and Their Antimicrobial Sensitivity in a Tertiary Care Hospital in Western Odisha.

Dr Mitrabinda Pattnaik

BACKGROUND:

Neonatal sepsis remains a major cause of morbidity and mortality, among neonates (0-28 days). The increasing resistance of pathogens to commonly used antimicrobials complicate treatment strategies.

AIM:

To identify the pathogens responsible for neonatal sepsis and analyse their antimicrobial sensitivity patterns in a tertiary care hospital in Western Odisha.

OBJECTIVE:

To develop a strategy to prevent and treat neonatal sepsis effectively in low-income countriesand to reduce morbidity and mortality of neonates.

METHODS:

A study was conducted inHi-Tech Medical College and Hospital, Rourkela from January 2024 to June 2024, 56 neonates with clinically suspected sepsis were evaluated, and blood cultures from 30 of these cases tested positive. Blood samples were collected aseptically, and the organisms were identified based on their colony characteristics and biochemical properties. The antibiotic susceptibility of the positive isolates was assessed using the Kirby-Bauer disc diffusion method, following CLSIguidelines 2023 (M100) for interpretation.

RESULTS:

Among the 30 culture-positive neonates, 60% were male and 35% had early onset sepsis. Gram-negative bacteria were responsible for 60% of the cases, with *Klebsiella pneumoniae*, *Escherichia coli*, and*Pseudomonas*being the predominant pathogens. Gram-positive organisms (30%) included *Staphylococcus aureus*, *Enterococcus*.Candida albicans contributed 10% of all culture positive isolates. The average birth weight of the neonates was 1850±387 grams, with those having early onset sepsis weighing significantly less (1623±300 grams) compared to those with late onset sepsis (1971 ± 376 grams). The study also revealed a notable level of antimicrobial resistance among both gram-positive and gram-negative bacteria,

indicating challenges in treating these infections with commonly used antimicrobials. Gram-negative organisms showed higher sensitivity to antibiotics like Meropenam, Piperacilin-Tazobactam and resistance to Cefotaxime, Amikacin, Gentamycin, Ampicillin.Gram positive organism show sensitivity toLinezolid andVancomycin and resistance to Penicillin and Cephalosporingroupofantibiotics.

CONCLUSIONS:

This study highlights the prevalence of sepsis in neonates and provides insights into the bacterial causes and their resistance patterns, which is essential for guiding effective treatment strategies.

KEYWORDS:

infection, neonatal sepsis, neonates, antibiotic resistant, Low birth weight babies

PO - 17

Blood stream infection due to pigmented Burkholderiacepacia complex in cases of hematological malignancy: A report of three cases

Dr Nagendhira Raju. M

INTRODUCTION

Burkholderiacepaciacomplex (BCC) are Gram-negative, nonfermenting bacilli, widely distributed in diverse habitats and recognized as emerging etiologyof blood stream infections(BSI) in immunocompromised individuals.Nosocomial Bcc outbreaks have been reported due to identified sources from hospital environments.

We report three cases ofcommunity acquired BSI with pigmented BCC in patients with hematological malignancy.

METHODS:

Nonlactosefermenting , violet pigmented oxidase positive colonies grown from blood culture, differentiated from *Pseudomonas* by ability to grow on selective BCCagar(not *Pseudomonas aeruginosa* ATCC 27853) and from *Chromobacteriumviolaceum*as negativeglucose,trehalose fermentation,positive ornithine, lysinedecarboxylase, thenconfirmed as BCC complexby VITEK 2,antibacterial susceptibility as per CLSI.

CASE DETAILS:

Case1-Girl(14 yrs), known case of T-ALL admitted with complaints of fever, cervical swelling,

mediastinal mass. **Case 2**-Man(41 yrs), known case of B-ALL admitted for chemotherapy with complaints of fever for 10 days. **Case 3**– Girl(7yrs), known case of B-ALL, admitted for chemotherapy. All were started with empirical meropenem and amikacin after sending blood culture. Pigmented BCC isolated from blood culture of all which were susceptible to meropenem, ceftazidime, trimethoprim-sulfamethoxazole except first case (meropenem intermediate). Thus, first case was switched toceftazidime and others continued with meropenem and recovered on day 5-7.

DISCUSSION

BCC are known for their capacity to contaminate medical products and nosocomialtransmission, howeveracquired fromcommunity is rarely reported.They have contrasting susceptibility to that of *Pseudomonas*andintrinsically resistant to aminoglycosides, first-second generation cephalosporins, antipseudomonal penicillins and polymyxins, giving extreme value to their proper identification.

CONCLUSION

All three cases were haematological malignancy under chemotherapy and of community origin as blood culture sets on day of admission were positive and responded well to meropenem/ceftazidime. Few studieshave reported with similar findings. Thus, more studies with comprehensive approach to identify non-fermenters is needed to reach the correct identification of BCC.

PO - 18

Trends of Mics of Vancomycin towards MRSA Strains in A Tertiary Health Care Centre of Southern Odisha

Dr Sameekhya Dash

INTRODUCTION

*Staphylococcus aureus*is ubiquitous in nature and a known colonizer in humans.Recently,*S. aureus* has raised concerns due to increasing methicillin resistance. Methicillin resistant*Staphylococcus aureus*(MRSA) infections do not respond to beta-lactam antibiotics.Theglycopeptide vancomycin was considered to be the best alternative for the treatment of multi drug resistant MRSA.Vancomycin Intermediate *S.aureus*(VISA) and Vancomycin Resistance *S.aureus*(VRSA) has been increasing due to minimal alternative therapeutic options. Heterogeneous vancomycin intermediate *S.aureus*(hVISA) strains appear to be an early stage in the development of VISA and have been related to persistent bacteraemia, greater rates of complications and vancomycin treatment failure.

OBJECTIVE

To determine the prevalence of VRSA,VISA andhVISA by different detection techniques.

METHODS

A prospective study was conducted over period of 6 months wheredetection of vancomycin resistance was done by:

1) Brothmicrodilution 2) E-test

3) Macromethod E-test (MET) 4) E-test GlycopeotideResistance Detection(GRD)

RESULT

Out of 315 isolates of *Staphylococcus aureus,*125(39.68%) number ofMRSAwas detected.Among these,11(8.8%)isolateswere VISA and 4(3.2%)werehVISA.No VRSA strain were detected.

DISCUSSION

In current study, out of 315 samples of *Staphylococcus aureus*125 samples (39.68%) detected as MRSA which is similar to Tiwari et al (44.7%). 11(8.8%) were detected as VISA which is similar to(11.6%)Mohanty*, et al*study.4 samples(3.2%) detectedas hVISAis similar to (3.3%)Gregorio et. al.

CONCLUSION

The present study reveals the emergence of VISA/hVISAfrom this part of Odisha and may limit its usefulness in Methicillin resistant isolates.Inview of increasing glycopeptideresistance, the susceptibility status of vancomycin should be investigated periodically.

PO - 19

Prevalence of Hepatitis B Among Jaundiced Cases in Paediatric Age Group in a Tertiary Care Centre

Dr Nikita Das

INTRODUCTION

Hepatitis B infection is a potentially life threatening liver infection caused by Hepatitis B virus. .Approximately 350-400 people are chronically infected with HBV and more than 3 Billon people has been exposed world-wide. Horizontal and Vertical transmission in childhood HBV are more common and associated with chronic infection.

AIM OF THE STUDY ND OBJECTIVE-

To evaluate the burden of Hepatitis B infection from clinically suspected jaundice cases among paediatric age group.

MATERIALS AND METHODS

A hospital based retrospective study was done from June 2023 to June 2024 at Department of Microbiology in collaboration with Department of paediatric. Samples were processed by using LFT and HbsAg detection by ICT method.

RESULTS

Total 163 clinically suspected jaundice Samples were taken out which 60% cases were male child 40% cases were female child and 42 % cases of jaundice were from 9 -12 yrs. of Age group and most positive cases are associated with acute viral Hepatitis.

CONCLUSION:

Horizontal mode of transmission plays an important role in paediatric age group.

PO - 20

A case report on botryomycosis on both buttocks.

Dr. Mohammed Abdul Mazid

INTRODUCTION:

Botryomycosis,a rare chronic granulomatous bacterial infectionusually involves skin and rarely viscera,characterised by multiple nodular ,cystic,granulomatous,indurated skin lesions with pus containing grains.Main etiological agent is*Staphylococcus aureus followed by PsuedomonasSpp.,Proteus spp., Klebsiella spp. and E.coli*

CASE HISTORY

In April 2024, a 48 year old malepatient attended the Department of Skin and V.D.with a 4 month history of multiple oozing skin lesions on boththe buttocks.Onlocal examination,there are were multiple fistula which were tender , nodular , cystic andindurated.All vitals were within normal limits without any history of diabetic mellitus or immunosuppressive disease.The patient had taken various medicationsincluding antifungal tablets.The patient was referred to Department of Microbiology for further investigations.

METHOD

The pus was collected aseptically from multiple oozing skin lesions after applying pressure over the indurated area. The pus was inoculated on Blood agar,MacConkey agar, 2 tubes ofSDA and incubated.Gram staining,Z.N.Staining and KOH wet mount was performed

RESULT

Few pus cells and gram negative bacteria were seen in gram stain. No AFB was found in ZN stain and no fungal elements were detected on KOH mount. After overnightincubation mucoid lactose fermenting colonies were found in blood agar and macConkey agar. The identification and susceptibility test was done both byconventional and automated method (VITEK-2 compact). The organism was identified to be *klebsiellapneumoniae and susceptible to Tigecycline (MIC<=0.5)* Amikacin (MIC 4),Gentamycin(MIC<=1) and Cotrimoxazole (MIC<=20)

The patient was treated with injection Tigecycline(100mg IV once daily) and tab. Cotrimoxazole(80/ 400 mg BID) for 10 days and showed remission within20 days.

DISCUSSION

Botryomycosis is a rare disease which may present in cutaneous or visceral form.Most cases present with nodules abscesses and sinuses with purulent discharge (similar to that in our patient). *Staphylococcusaureus* is the most common etiological agent, however *Klebsiella pneumoniae* was isolated in this case.

CONCLUSION

This type of presentation usually diagnosed as exogenous actinomycosis or eumycetoma.In rare instances *Klebsiellaspp*. can also present such type of lesions. Therefore complete microbiological analysis would be beneficial for the patient.

PO - 21

Bacteriological profile and their antibiotic susceptibility pattern of Blood stream infection isolates - A Study from tertiary care hospital.

Dr Jyotsna Padhan

INTRODUCTION:

Bloodstream infection (BSI) remains one of the most important causes of morbidity and mortality globally, specifically among ICU patients. BSI can be due to bacterial, viral, fungal and protozoal causes. Bacteremia is defined as the presence of viable bacteria in blood without any multiplication.

OBJECTIVES:

- To study the prevalence of pathogenic bacteria causing blood stream infections and their antibiotic susceptibility pattern.

METHOD:

A cross-sectional study was conducted from Jan 2024 to June 2024 among BSI suspected patients from ICU and wards. Systematic random sampling method was used to select patients. Blood culture was done. Bacterial isolation, identification and Antimicrobial susceptibility test of the isolates was performed. Prevalence percentages were determined.

RESULT:

Total number of blood culture samples collected was 874. The rate of prevalence of bacteriologically positive cases was found to be 15.3% (134/874 samples). BSI caused by Gram positive cocci was 55.9 % and Gram-negative bacteria was 43.2%. Majority of Gram positive isolates was *S. aureus* (96%), followed by Enterococcus. Out of this 95% were sensitive to Vancomycin, 88% sensitive to Linezolid and 59% sensitive to Gentamicin. Among the gram negatives, *Klebsiella spp* was highest (79%) whose sensitivity was found to 81% to Imipenem, 74% to Meropenem and 65% to Colistin. Other Gram negative isolates were *Pseudomonas aeruginosa, Acinetobacter spp.* and *Escherichia coli*.

DISCUSSION:

In the present study, Gram positive isolates were more common than Gram negative isolates. Majority of the isolates were sensitive to the antibiotics used for the treatment of BSI.

CONCLUSION:

Blood culture is the mainstay of diagnosis of BSI. The AST pattern of the causative pathogenic bacteria can guide in the judicious use of antibiotics for BSI treatment.

PO - 22

Clinical and Mycological Patterns of Superficial mycoses in a tertiary care hospital of Eastern Odisha

Dr. Vijayalaxmi Hansdah

INTRODUCTION:

Superficial mycoses are commonly encountered fungal infections confined to the skin, hair, and nails. They are more commonly found in tropical and subtropical regions. Different factors such as poverty, poor hygiene, overcrowding, and certain jobs which require continuous exposure to moisture and humidity are the risk factors contributing to this infection.

OBJECTIVE:

This study aims to evaluate the clinical and mycological patterns of superficial mycoses in patients attending a tertiary care hospital in eastern Odisha.

MATERIALS & METHODS:

A total of 427 samples from the dermatology department, over a period of 6 months, were processed and all were examined by direct KOH preparation and fungal culture methods. Identification of species was done by culture characteristics, LPCB stain, and biochemical tests (urea hydrolysis test, sugar fermentation test, and sugar assimilation test).

RESULTS:

This study suggests that the most affected age group is 21-30 years, with a male preponderance. The commonest clinical presentation was Tinea corporis followed by Pityriasis versicolor, Tinea cruris, Tinea pedis, Onychomycoses, and Tinea capitis. Dermatophytes were the predominant causative agent, constituting 65% of all cases, followed by non-dermatophytic molds and yeast. Among the Dermatophytes, *Trichophyton rubrum* was the most frequently isolated species, constituting 38.7% of the total isolates, followed by *Trichophyton mentagrophyte (24.1%)*. Among non-dermatophytic molds, *Aspergillus(4.8%), Fusarium(3.2%), Curvularia(1.6%), and Penicillium(1.6%)* were isolated. Among yeasts, *Trichosporon (3.2%)* along with *candidaalbicans* (20.9%) were isolated.

DISCUSSION AND CONCLUSION:

This study highlights the predominance of Dermatophytes, particularly *Trichophyton rubrum*, and the common clinical presentation of Tinea corporis. The findings suggest that a comprehensive understanding of the epidemiology of superficial mycoses is essential for developing targeted treatment strategies and preventive measures in eastern Odisha.

PO - 23

Antibiotic Susceptibility Profile of Salmonella Typhi and Paratyphi a from Blood Samples in a Tertiary Care Hospital

Dr Nishikanta Muduli

INTRODUCTION:

Enteric fever, a systemic infection caused by *Salmonella* Typhi (*S*. Typhi) and *Salmonellaparatyphi* A (*S*. *paratyphi* A), is a major persistent global health problem and is predominantly reported in the developing countries. However, the indiscriminate use and predominantly misuse of the antimicrobials have resulted

in the emergence of multidrug-resistant strains.

AIM & OBJECTIVE

This study aimed to determine the antibiogram profile of *S*. Typhi and *S*. *paratyphi* A isolated from blood cultures.

MATERIAL AND METHODS

Retrospective study was done from May 2022 to April 2024. Blood samples were processed in BacT/ALERT culture bottles. Identification and antimicrobial susceptibility testing was done with the help of VITEK2 system(BIOMERIEUX).

Result:

During the study period 195 *Salmonella* enterica serovars were isolated. Out of which 131(67%) were *S.paratyphi* A and 64(32.8%) were *S*. Typhi. Majority of the *S*.Typhi and *S*. *paratyphi* A were sensitive to Co-Trimoxazole, Tigecycline, Cefipime, Ceftazidime, Amoxyclav, Ceftriaxone, Imipenem, Meropenem and 100% resistant to Ciprofloxacin and Gentamicin.

DISCUSSION AND CONCLUSION:

S. *paratyphi* A accounted for the majority of cases of enteric fever in our study. Whereas Umair et al.(2020), reported *S*. Typhi were isolated from majority cases of enteric fever. In our study most *S*. Typhi and*S*.*paratyphi* A isolates were sensitive to first-line antibiotics like Co-trimoxazole, Chloramphenicol and Amoxicillin whereas Umair et al.(2020)reported most of the isolates to beresistant to first-line antibiotics. This changing susceptibility pattern necessitates continuous surveillance of antibiogram of *Salmonella* isolates to rationalize the treatment protocols for invasive *Salmonellosis* and prevent emergence of resistant strains.

PO - 24

Study of Mycological Profile of Otomycosis in A Tertiary Care Centre, Western Odisha

Dr Ashis Kumar Pratihari

INTRODUCTION

Otomycosis is a superficial, subacute or chronic infection of the External auditory canal usually unilateral is characterised by inflammation, pruritus, otalgia and ear discharge. It is worldwide in distribution with prevalence ranging from 9%-30% among patients.

AIM OF THE STUDY ND OBJECTIVE:

To evaluate the mycological profile of patients suffering from otomycosis.

MATERIALS AND METHODS

A hospital based retrospective study was done from July 2023 to July 2024 in the Department of microbiology in collaberation with Department of ENT. Samples were produced by using clinical history and KOH mount, culture on SDA media and isolates identified by standard mycological procedures.

RESULTS

Out of 84 samples of aural swab 52 samples (61.9%) shows fungal growth. Out of these Aspergillus niger were isolated in 27 samples(51.9%). Aspergillus flavus were isolated in 21 samples(40.3%). Candida species were isolated in 4 samples(7.6%).

DISCUSSION:

In this study 31 samples(59.6%) are positive for both microscopy and culture and 21 samples(40.3%) positive for only culture. In this study Aspergillus niger is the most common fungi isolated followed by Aspergillus flavus and few candida species.

CONCLUSION

Adequate measures need to be taken for the early identification and treatment of otomycosis so that it can prevent the progress of the disease.

PO - 25

Disseminated Talaromycosis: A Report of Two Cases in Southern Odisha

Dr Rohan Pandey

INTRODUCTION:

Talaromyces marneffei (formerly *Penicillium marneffei*) is a thermally dimorphic fungus causing opportunistic infection in immunocompromised patients and is prevalent in regions of Southeast Asia and Northeast India. The soil burrowing bamboo rats (*Rhizomys sinensis*) acts as its reservoir and is transmitted by the inhalation of conidia. Disseminated infection being the most common presentation in advanced AIDS cases and now commonly found in neoplastic and solid organ transplantat recepients.

CASE SCENARIOS:

1. A 45 year old HIV seropositive male patient, presented with fatigue, dyspnea, and cough for 12 days, with history of altered sensorium 2 days back.
2. A 65 year old multiple myeloma female pateint presented with fever and generalised weakness and cough for 8 days

MATERIALS AND METHODS:

Blood and induced sputum from both the patients were collected for microbiological evaluation. The blood was inoculated in BHI broth (1:10) at 25°C and 37°C. All samples were inoculated on Blood agar, MacConkey agar for bacteriological evaluation(37°C) and SDA slants (25°C and 37°C) for mycological evaluation. Lymph node biopsies were sent for histopathological evaluation.

RESULTS:

No bacterial growth were detected from sputum and blood cultures from both the cases. But yeast like colonies were isolated from the culture at 37°C and deep reddish pigment producing filamentous fungi were isolated from the culture at 25°C from both the samples. Based on microscopic and morphological characteristics of the colonies, the isolates from both the cases were identified as *Talaromyces marneiffei.*

CONCLUSION:

As *Talaromyces marneiffei* was isolated from both sputum and blood sample it was considered as cases of disseminated Talaromycosis. Hence, all patients should be subjected to mycological evaluation for prompt diagnosis and better prognosis.

PO - 26

Serodiagnosis of Japanese Encephalitis in A Tertiary Care Hospital, Western-odisha

Dr Sidhanta Kumar Behera

INTRODUCTION

Japanese Encephalitis (JE) is most rapidly spreading vector borne viral disease. Varied manifestations ranging from subclinical infection to severe encephalitis. In India JE continue to be an important public health problem, as evidenced by the high proportion of JE positivity, severity and case fatality.

OBJECTIVE

1. To evaluate the utility of serodiagnosis of JE virus infection.
2. To co-relate the results with demographic, clinical profile of clinically diagnosed JE patients.

METHODS

It is a prospective study done in VIMSAR, BURLA from JAN 2024 to JUNE 2024. Serum samples of 185 clinically suspected JE patients reporting to VIMSAR, Burla where processed by ELISA (IgM MAC ELISA) in the Dept. of Microbiology, VIMSAR, Burla.

RESULTS

Out of 185 samples, 45 (24%) samples were found positive by IgM MAC ELISA. Out of the 45 seropositive cases 32 (71%) were Male. Majority of cases belongs to 9-12 years age group and most of case belongs to Bargarh District. Among the seropositive cases, 100% were having high grade fever followed by nausea, vomiting, convulsion.

CONCLUSION

In our study early serodiagnosis and admission of suspected JE case and prompt administration of antipyretic and supportive treatment will significantly reduce the morbidity and mortality.

PO - 27

Bacterial profile and antimicrobial susceptibility patterns of isolates among patients diagnosed with surgical site infection at a tertiary care hospital.

Dr Dr. Nishikanta Sahoo

INTRODUCTION:

A **surgical site infection** (SSI) is an **infection** that occurs in the **incision** created by an invasive surgical procedure within 30 days after surgery . Globally, surgical site infections are the most reported healthcare-associated infection and common surgical complication. They threatened the lives of millions of patients each year and contribute to the spread of antibiotic resistance.

OBJECTIVE:

1. To study the bacteriological profile of pus samples collected from the infected surgical sites.
2. To determine the antibiotic susceptibility pattern of isolated pathogens isolated from pus samples.

METHODS:

The study was conducted in department of microbiology, Hi-Tech Medical College, Pandara, Bhubaneswar from January 2024 to June 2024 . All pus samples were processed on Blood agar, MacConkey agar and incubated at 37°c for 24 hours. The organisms were identified as per standard conventional methods and automated methods. The antimicrobial susceptibility tests were done by Kirby–Bauer's Disk Diffusion method on Mueller–Hinton Agar and interpreted as per clinical laboratory standard institution guidelines (CLSI).

RESULTS:

Out of the 200 samples, 68 (34.0%) samples showed positive culture growth. The most prevalent Gram-negative isolate was *Klebsiella pneumonia* - 20 (29.41 %), followed by *Pseudomonas aeruginosa*- 14 (20.58%) and then *Escherichia coli* - 13 (19.11%). The only Gram positive isolate was *Staphylococcus aureus* - 21 (30.88%). All gram-negative isolates were resistant to amoxicillin-clavulanic acid (94.0%), amoxicillin (94.0%), cefixime (90.7%), and cefepime (89.8%). Similarly, none of the gram-positive isolates were susceptible to ampicillin, amoxicillin, and ampicillin/sulbactam.

Discussion & Conclusion-

The rate of SSI observed in this study will be comparable to other similar studies, however we observed a higher degree of antimicrobial resistance. Among all gram negative bacteria, *Klebsiella pneumonia* and among Gram positive bacteria *Staphylococcus aureus* were most common etiology of pus forming infection most importantly surgical site infections (SSI).

Adherence to strict infection control measures, maintenance of proper hand hygiene and optimal pre-operative, intraoperative and postoperative patient care will reduce the incidence of SSIs.

REFERENCES :

1. Patel L P, Shingala H K, Mehta K D, Bacteriological profile of surgical site infections and their antimicrobial susceptibility pattern at a tertiary care hospital, Western Gujarat. ***IP Int JMed Microbiol Trop Dis*** 2024;10(2):174-181
2. Banik A, Haldar S, Kundu S, Bhunia S, Behera K K, Roy C, Ganguly-bhattacharjee S , Dey J B, A study on clinico-demographic and microbiological profile of surgical site infection (SSI) in a tertiary care hospital, Kolkata: An alarming trend. ***Indian J Microbiol Res*** 2024;11(1):25-33
3. Negi V, Pal S, Juyal D, Sharma MK, Sharma N. Bacteriological Profile of Surgical Site Infections and Their Antibiogram: A Study From Resource Constrained Rural Setting of Uttarakhand State, India. J Clin Diagn Res. 2015 Oct;9(10):DC17-20. doi: 10.7860/JCDR/2015/15342.6698. Epub 2015 Oct 1. PMID: 26557520; PMCID: PMC4625239.
4. Dahal, Krishna & Rawal, Laba & Shah, Sangam & Pokharel, Shristy & Dahal, Mahesh & Shrestha,

Sahira & Mishra, Shyam & Maharjan, Sujina & Baidya, Sujata. (2024). Pattern of antibiotic resistance in surgical site infections in a tertiary care hospital of Nepal. International Journal of Surgery: Global Health. 7. 10.1097/GH9.0000000000000403.

5. Sajjanar, V., De, P., Kc, S., & N, P. (2024). Study of bacteriological profile and antibiotic susceptibility pattern of pus isolates in tertiary care hospital. *IP International Journal of Medical Microbiology and Tropical Diseases/IP International Journal of Medical Microbiology and Tropical Diseases*, *9*(4),253–257. https://doi.org/10.18231/j.ijmmtd.2023.048

PO -28

A study on susceptibility of carbapenemase producing Enterobacterales and *Pseudomonas aeruginosa* to Aztreonam and Ceftazidime-Avibactam combination at a tertiary care Hospital

Dr. Priyanka Mahapatra

BACKGROUND:

Multi Drug Resistant(MDR) pathogens are an emerging threat causing increased morbidity & mortality. Recently, rapid surge in MDR gram negative bacterial infection among hospitalized patients acts as a potential threat in management. Hence, the rising concern needs to be acknowledged.

OBJECTIVES:

- To isolate and identify Enterobacteriaceae and Pseudomonas aeruginosa(PAE) from different clinical samples.
- To determine the Carbapenem resistant Enterobacteriaceae(CRE) and PAE by different phenotypic methods.
- To evaluate invitro efficacy of Aztreonam(ATM) and Ceftazidime-Avibactam(CZA) drug combination on CRE and PAE isolates.

METHOD:

A hospital based prospective study was conducted from May to July 2024, where 450urine and 360 other body fluid samples were subjected for routine culture to isolate & identify Enterobacterales & PAE using standard procedures. Out of total samples, only 27 urine & 34 fluid samplessuspected to be CRE & PAE detected by Kirby-Bauer Disk Diffusion method were taken into study. Carbapenemase production by these 61 isolates were first confirmed by modified Carbapenem Inactivation Method(mCIM). The mCIM

positive isolates were subjectedto EDTA Carbapenem Inactivation Method(eCIM) to differentiate Metallo-beta-lactamase(MBL) producers from serine carbapenemase producing CRE & PAE isolates. MBL producers were finally subjected to ATM+CZA broth disk elution test to evaluate its invitro susceptibility. All the above-mentioned phenotypic methods & broth disk elution test are performed as per CLSI (34th edition) guidelines.

RESULT :

Out of the 61 carbapenem resistant isolates under study, 50were CRE and 11 were PAE. Among 50 CRE; 22were *Klebsiella* spp, 21 *E.coli* and rest 7 were other Enterobacterales. 88.3% of total isolates were susceptible to ATM+CZA, 25% susceptible to ATM whereas, $\leq$ 1% to Ceftazidime (CAZ) only.

DISCUSSION AND CONCLUSION:

In this sense, ATM+CZA can potentially be a suitable combination as compared to single drug therapy for treatment of CRE. Hence, further studies of CRE on larger sample size and better evaluations of drug efficacy with genotypic variations is the need of the hour to prevent this emerging threat.

PO - 29

Laboratory diagnosis of Typhoid fever using blood culture, widal and rapid diagnosic tests.

Dr Bijayalaxmi Patra

INTRODUCTION:

Typhoid is an enteric disease caused by Salmonella Typhi , which is primarily transmitted through contaminated food or water. Typhoid cases are most prevalent in places with poor sanitation and a lack of safe drinking water—most commonly low- and middle-income countries. Symptoms include prolonged fever, fatigue, headache, nausea, abdominal pain, constipation or diarrhea, with severe cases leading to serious complications and even death.

OBJECTIVES:

To evaluate the different diagnostic stardands for better diagnosis of typhoid fever in clinically suspected cases of typhoid fever.

METHODS:

Blood samples were collected from 140 patients with symptoms clinically similar to typhoid fever

for laboratory investigations which includes rapid test for IgG & IgM, widal test for agglutination test and blood culture in same patients.

RESULT:

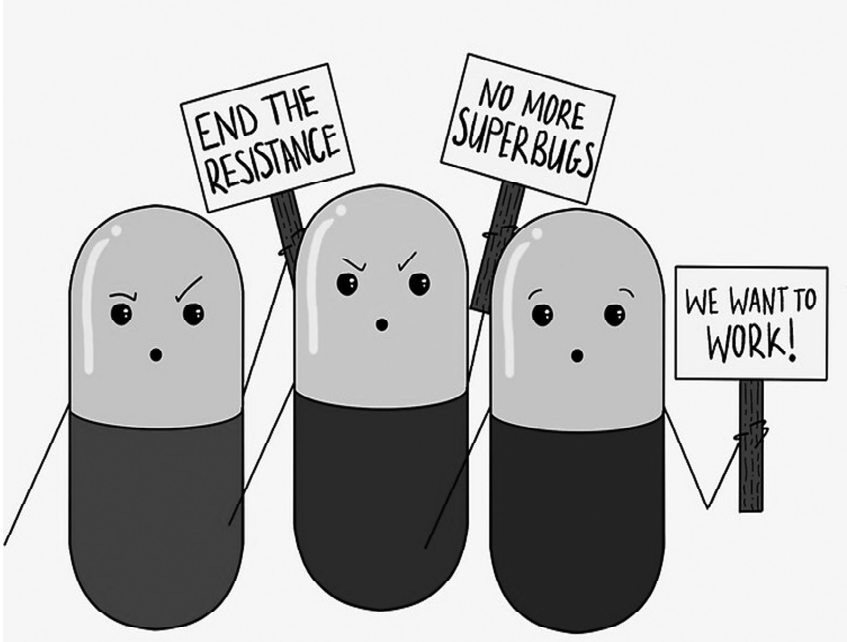
Out of 81 patients with 1 week of illness ,Blood culture was positive for 52 patients(64.19%), widal positive for 19 patients(23.45%), typhidot positive for 60 patients(74.07%). In comparison to the gold standard test i:e blood culture, Widal test and Typhidot had sensitivity and specificity of 30.7% & 10.34% and 100% & 58.06% respectively. In 2nd week of illness out of 59 patients, blood culture positive for 6 patients(10.16%), widal positive for 42 patients(71.18%), typhidot positive for 52 patients(71.18%). In comparison to the gold standard test i:e blood culture, Widal test and Typhidot had sensitivity and specificity of 100% & 67.92% and 100% & 58.53% respectively.

DISCUSSION:

The rate of isolation for blood culture which reports sensitivity of 65-68% is corellated to documented data. As blood culture is gold standand test for typhoid fever in 1st week , widal and typhidot has been compared in this study for specificity and sensitivity.

CONCLUSION:

Typhidot is found to have high sensitivity and good specificity and easily avalable with fewer resourses, it is simple to perform, gives faster reports i.e 1hr in comparision to widal i.e. 18hrs , blood culture i.e. 48hrs.



Antibiotic Resistance Protest

ARTIFICIAL INTELLIGENCE IN CLINICAL MICROBIOLOGY- A BOON OR A BANE?

Dr Soumya Sibani Sahoo

Assistant Professor, Dept. of Microbiology, SCB MCH, Cuttack.

Artificial intelligence (AI) is revolutionizing numerous fields, and clinical microbiology is no exception.Clinical microbiology deals with identifying microorganisms, which are the causative agents of infections and diseases. The techniques employed for detection include cultivating bacteria and fungi in appropriate growth media, isolating viruses in cell culture, and characterizing the infectious agent by biochemical, antigenic, or genetic means. These conventional practices require more time, effort and skilled man power. The use of AI has made this process easierwhere vast amounts of data can be analysed with unprecedented speed and precision. It has not only fastened the diagnostic time in Clinical Microbiology which was a major concern in the past, but also promises to identify a greater number of pathogens with accuracy and perform the antimicrobial susceptibility tests with ease.It helps to initiate early specific treatment in patients with infectious diseases thus preventing the development of multidrug resistance pathogens in future. Not only the practice of AI is limited in diagnostic Microbiology, it has also made its way in improvising the therapeutic modalities of Microbiology like manufacturing newer vaccines or immuno-modulators or monoclonal antibodies for the benefit of mankind and strengthening the modern medicine services.

Like there are two sides of a coin, with so many benefits, it also has its flaws. All the steps for operating AIs need technical expertise, otherwise it can provide erroneous report.The ethical consideration of the data isa major issue,as they are gathered and stored online by social media, genetic testing, and bioinformatic companies, it can be hacked and used for unethical purposes. Since these systems rely on vast datasets which may contain sensitive health information, it is essential to protect the privacy of the patients.Besides thereis fear among the health care providers that their job may be replaced by use of AI in different sectors.As these systems rely on internet connections, its lack of access in resource-limited regions can hinder the application and maintenance. The teaching practice should focus on the conventional tests which provide basic knowledge to the students alongwith acquaintance with the AI systems.

Hence there has to be a balance between the conventional tests and use of AI in the diagnostic procedures and at the end,the report generation should be decided by the health care providers. Efficient balance between these technical eco-systems is crucial,so that AI integration into microbiological diagnosis can be more boon than bane.

ଅଣୁଜୀବିର ସ୍ୱର

ଡାକ୍ତର ପ୍ରଜ୍ଞା ନାୟକ
ଅଣୁଜୀବ ବିଭାଗ

ରୋଗୀର ରୋଗକୁ ଥାଏ ତ ଡର
ଜୀବାଣୁ ହେଉଛି ରୋଗର ଘର ।୧।
ଅଣୁଜୀବ ନାମେ ଏକ ବିଭାଗ ଅଛି
ଜୀବାଣୁମାନଙ୍କ ପରୀକ୍ଷା ସେଠି ହେଉଛି ।୨।
ଇଟା, ମାଟି, ସିମେଣ୍ଟ ବିନା ଘର ହୁଏନି
ବିନା ପରୀକ୍ଷାରେ ରୋଗୀ ଭଲ ହୁଏନି ।୩।
ଅଣୁଜୀବିଙ୍କର କିଛି ସାହାଯ୍ୟ ଦେଇ
ଡାକ୍ତର ରୋଗୀକୁ ଭଲ କରଇ ।୪।
କରୋନା କଥା ଯେବେ ମନେ ପଡ଼ଇ
ଅଣୁଜୀବି ବୋଲି ମୁଁ ତ ଗର୍ବ କରଇ ।୫।
ଅଣୁଜୀବ ବିଭାଗରେ ଯୋଗ ଦେଇଛି
ବର୍ଷକର ସ୍ମୃତିରୁ ମୁଁ ଗୋଟେ ଲେଖୁଛି ।୬।
ଦିନେ ରୋଗୀଟିଏ ଚର୍ମ ବିଭାଗ ଗଲା
ଛଅ ମାସ ପାଇଁ ଔଷଧ ସେବନ କଲା ।୭।
ଦିନ ପରେ ଦିନ ତା'ର ଗଡ଼ି ଚାଲିଲା
ଛୋଟ ଘାଆଟିଏ ଦିନେ ବଡ଼ ହୋଇଲା ।୮।
ଶେଷରେ ରୋଗୀ ଅଣୁଜୀବ ବିଭାଗ ଗଲା
ରୋଗର ପରୀକ୍ଷା ସବୁ ସେଠାରେ କଲା ।୯।
ରୋଗର କାରଣ ଅଣୁଜୀବି ଚିହ୍ନଟ କଲେ
ବିନା ପରୀକ୍ଷାରେ ଔଷଧ ସେବନ ଭୁଲ କହିଲେ ।୧୦।
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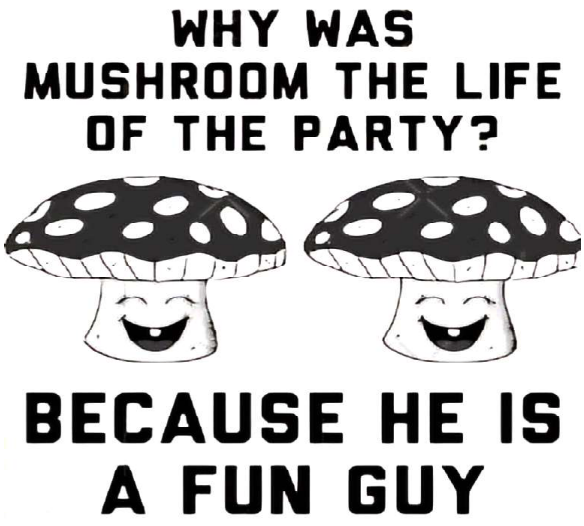
ଆମ ବିଭାଗ ନେଲା ବାଃ ବାଃ ରେ ।୧୧।
ବିଦ୍ୱାନ ଗୁରୁଙ୍କୁ ମୁଁ ଏଠାରେ ପାଇଛି
ତାଙ୍କ ପାଦତଳେ ମଥା ନଥ କରୁଛି ।୧୨।
ଅଣୁଜୀବ ବିଭାଗର କର୍ମଚାରୀଙ୍କ ପାଇଁ
କାଳିଆ ପାଖରେ ମୁଁ ଗୁହାରୀ କରଇ ।୧୩।
ସମସ୍ତଙ୍କର ଇଚ୍ଛା ପୂରଣ ହେଉ
ଆମ ବିଭାଗର ସୁନାମ ସବୁଠି ରହୁ ।୧୪।



CHRONOLOGY OF OFFICE BEARERS

SL NO	YEAR	PRESIDENT (IAMM)	SECRETARY (IAMM)	TREASURER (IAMM)
1	2007	Dr Saraju Bihari Pati	Dr Nagen Kumar Debata	Dr. Soumyakanta Sahoo
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
7	2013	Dr Sunil Kumar Mohanty	Dr Priti Lata Panda	Dr. Soumyakanta Sahoo
8	2014	Dr Nirupama Chayani	Dr Priti Lata Panda	Dr. Soumyakanta Sahoo
9	2015	Dr Sudhir Kumar Ghosh	Dr Priti Lata Panda	Dr. Soumyakanta Sahoo
10	2016	Dr Jagadananada Jena	Dr Gitanjali Sarangi	Dr. Bibhudutta Rautaraya
11	2017	Dr Ashok Kumar Praharaj	Dr Gitanjali Sarangi	Dr. Bibhudutta Rautaraya
12	2018	Dr Banojini Parida	Dr Gitanjali Sarangi	Dr. Bibhudutta Rautaraya
13	2019	Dr Priti Lata Panda	Dr Bimoch Projna Paty	Dr. Ashoka Mohapatra
14	2020	Dr Bandana Mallick	Dr Bimoch Projna Paty	Dr. Ashoka Mohapatra
15	2021	Dr Dipti Pattnaik	Dr Bimoch Projna Paty	Dr. Ashoka Mohapatra
16	2022	Dr Baijayantimala Mishra	Dr Bimoch Projna Paty	Dr. Ashoka Mohapatra
14	2023	Dr Gitanjali Sarangi	Dr Susanta Kumar Sahu	Dr. Bhabani Patnaik
15	2024	Dr Susanta Ku. Sahu	Dr Suneeta Sahu	Dr. Bhabani Patnaik

IAMM ODISHA CHAPTER
(CHRONOLOGY OF ANNUAL CHAPTER MEETS)

YEAR	VENUE	ORGANISING SECRETARY
2007	IMS & SUM HOSPITAL, BBSR	Dr Nagen Kumar Debata
2008	SCB MCH, CUTTACK	Dr Nirupama Chayani
2009	MKCG MCH, BERHAMPUR	Dr Priti Lata Panda
2010	LVPEI, BBSR	Dr Savitri Sharma
2011	HITECH MCH, BBSR	Dr Jyoti Prakash Mitra
2012	APOLLO HOSPITAL, BBSR	Dr Suneeta Sahu
2013	IMS & SUM HOSPITAL, BBSR	Dr Bichitrananada Swain
2014	KIMS, BBSR	Dr Jagadananda Jena
2015	SCB MCH, CUTTACK	Dr Nirupama Chayani
2016	AIIMS, BBSR	Dr Bijayantimala Mishra
2017	AMRI, BBSR	Dr Bibhudutta Rautaraya
2018	MKCG MCH, BERHAMPUR	Dr M. V. Narasimham
2019	APOLLO HOSPITAL, BBSR	Dr Suneeta Sahu
2023	SLN MCH, KORAPUT	Dr Susanta Kumar Sahu
2024	PRM MCH, BARIPADA	Dr Indrani Mohanty

CHRONOLOGY OF IAMM ODISHA CHAPTER FELICITATION

YEAR	NAME
2007	Dr Kailash Chandra Nathsharma
2008	Dr Nimananda Ray
2009	Dr Kanak Lata Pattnaik
2010	Dr Kamini Mohan Baisakh
2011	Dr Sudharani Kar
2012	Dr Jyoti Prakash Mitra
2013	Dr Saraju Bihari Pati
2014	Dr Shantilata Rath
2015	Dr Girija Shankar Tripathy
2016	Dr Rama Chandra Sahoo
2017	Dr Sunil Kumar Mohanty
2018	Dr Subhasini Chawda
2019	Dr Nagen Kumar Debata
2023	Dr Jagadananda Jena
2024	Dr Ashok Kumar Praharaj

RECIPIENTS OF DR BIKRAM DAS MEMORIAL ORATION AWARD

YEAR	AWARDEE
2008	Dr Tribhuban M Mohapatra
2009	Dr Pradeep Seth
2010	Dr Ranganathan Iyer
2011	Dr V Ravi
2012	Dr M. K. Lalitha
2013	Dr Pratibha Narang
2014	Dr Reba Kanungo
2015	Dr T. D. Chugh
2016	Dr Arunaloke Chakraborty
2017	Dr Shobha Broor
2018	Dr Tapan N. Dhole
2019	Dr Camilla Rodrigues
2023	Dr Radhakanta Ratho
2024	Dr Pallav Ray

OMM AWARDEES 2024

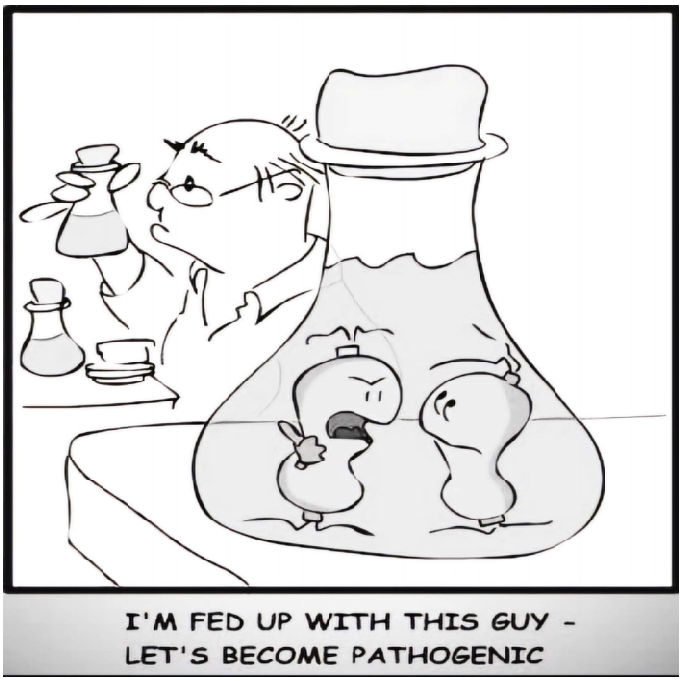
SL.NO	COLLEGE NAME	STUDENT NAME
1.	Srirama Chandra Bhanja Medical College, Cuttack	Swarnaprava Sahoo
2.	Veer Surendra Sai Institute of Medical Sciences & Research, Burla	Pabitra Mohan Sutar
3.	Maharaja Krushna Chandra Gajapati Medical College, Brahmapur	Arpita Swain
4.	Hi-Tech Medical College & Hospital, Bhubaneswar	Adyasa Pati
5.	Kalinga Institute of Medical Sciences, Bhubaneswar	Abhradeep Pal
6.	Institute of Medical Sciences and Sum Hospital, Bhubaneswar	Aryan Parida
7.	Hi-Tech Medical College & Hospital, Rourkela	Tapan kumar Barik
8.	All India Institute of Medical Sciences, Bhubaneswar	Roshni Poddar
9.	Saheed Laxman Nayak Medical College & Hospital, Koraput	Amit Kumar Jena
10.	Pandit Raghunath Murmu Medical College and Hospital, Baripada	Ipsita Mahapatra
11.	Bhima Bhoi Medical College & Hospital, Balangir	Dev Shivam Mishra
12.	Fakir Mohan Medical College & Hospital, Balasore	Anshika Nayak
13.	Shri Jagannath Medical College & Hospital, Puri	Tapavaya Mishra

CHRONOLOGY OF BEST PAPER FOR 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*	Dr Suneeta Sahu
	Mycoses in PLHA cases : A correlation to CD4 Count	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

CHRONOLOGY OF BEST PAPERS FOR 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
2023	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.
	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



LIFE MEMBERS OF IAMM ODISHA CHAPTER

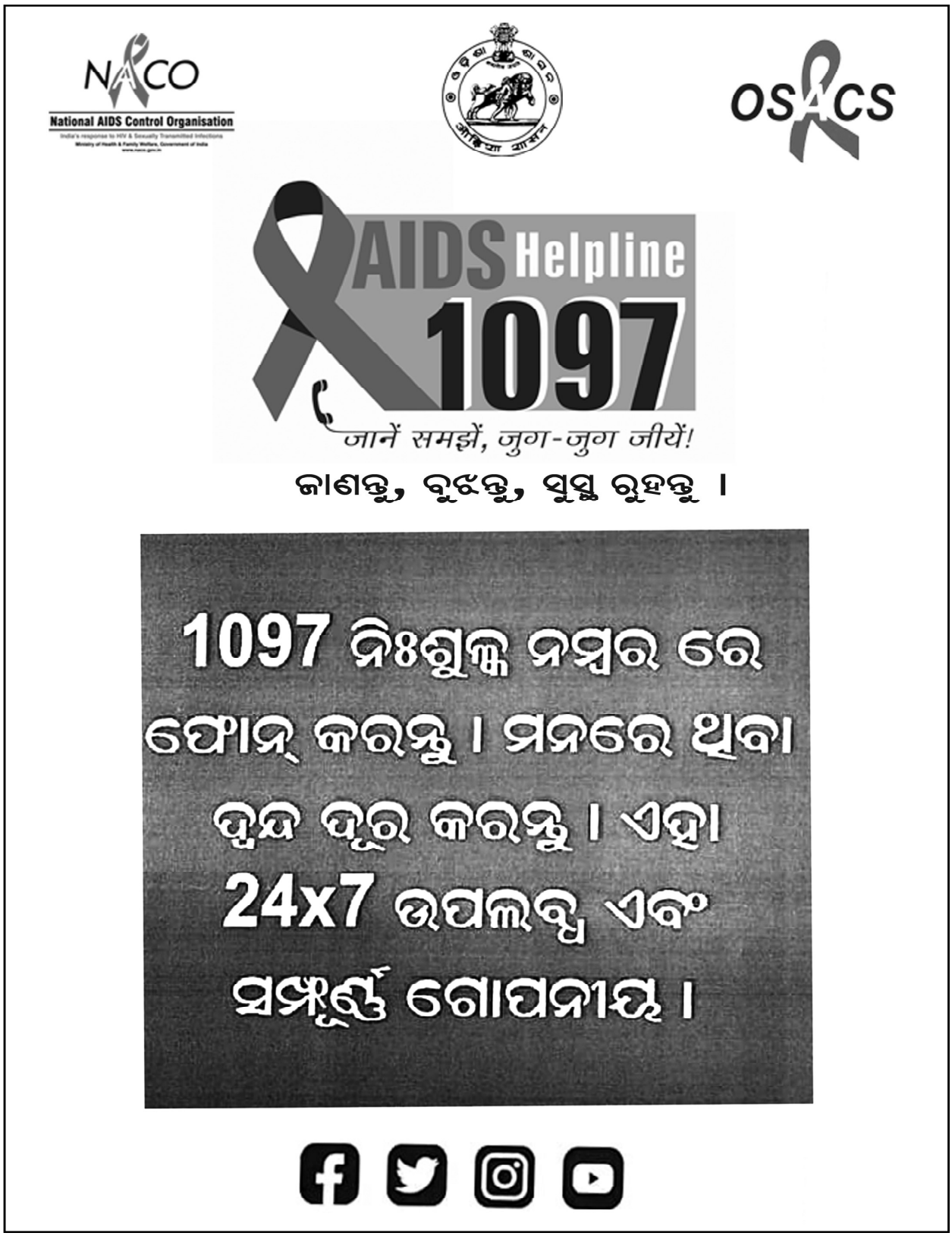
Sl. No.	Life Membership Number	Name of Life Member	Email	Mob.:
1.	LM/IAMM/ODISHA/1	Dr. K. C. Nathsarma		
2.	LM/IAMM/ODISHA /2	Dr. Santilata Rath		
3.	LM/IAMM/ODISHA /3	Dr. Sunil Ku Mohanty	drskmohanty3@ yahoo.com	
4.	LM/IAMM/ODISHA /4	Dr. Suhasini Chawada		
5.	LM/IAMM/ODISHA /5	Dr. Jyotiprakash Mitra		9437000238
6.	LM/IAMM/ODISHA /6	Dr. Saraju Bihari Pati	saraju_pati@rediffmail.com,	9437080687
7.	LM/IAMM/ODISHA /7	Dr. KaminimohanBaisakh	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 Muktikesh Dash	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	DrShreekant Tiwari	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 Sanghamitra Padhi	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 Dharitri Mohapatra	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 Sumanta Sahu	sumantasahu7@gmail.com	9861580987
65	LM/IAMM/ODISHA/65	Dr Bibhudutta Rautaraya	drbibhu_75@rediffmail.com	9437088129
66	LM/IAMM/ODISHA/66	Dr Soumyakanta Sahoo	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 SubhraSnigdha 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 Susmita Kumari 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		
87	LM/IAMM/ODISHA/87	Dr Baidyanath Mishra		
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	DrPragnya 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 PurabiBaral	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 Lalli Smruti Sahu	drlssahu@gmail.com	9439010105
110	LM/IAMM/ODISHA/110	Dr Madhumita Swain	dr.madhumita96@gmail.com	9861335970
111	LM/IAMM/ODISHA/111	Dr. Chandra Sekhar 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. Vinay kumar 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 KumariSahu	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. InduBiswal	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 ParthasarathiSatpathi	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 PratikshyaMahapatra	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 AninditaRoutray	loraanindita@gmail.com	9438707200
151	LM/IAMM/ODISHA/151	Dr Sigma Satapathy	sigmasatapathy1992@gmail.com	7735515785
152	LM/IAMM/ODISHA/152	Dr PriyadarshiniDebata	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	monalisa.subudhi.2012@gmail.com	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

"Microbiology Jokes never get old,
they just undergo spontaneous generation."


NACO
National AIDS Control Organisation
OSACS
AIDS Helpline
1097
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1097 ନିଃଶୁଳ୍କ ନମ୍ବର ରେ
ଫୋନ୍ କରନ୍ତୁ । ମନରେ ଥିବା
ଦ୍ୱନ୍ଦ ଦୂର କରନ୍ତୁ । ଏହା
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