RAPICON 2025 SPECIAL EDITION

SOUTHERN RAILWAY
HEADQUARTERS HOSPITAL, CHENNAI

"Clinical Chronicles: E-Magazine of Case Reports"

“நோய்நாடி நோய்முதல் நாடி அதுதணிக்கும்
வாய்நாடி வாய்ப்பச் செயல்”

ADVISORS

Dr C.M Ravi
PCMD/SR

Dr S Kalyani
PCMD/RH/PER

Dr V Kannan
MD/RH/PER

EDITOR-IN-CHIEF

Dr. D. Senkadhir Vendhan/DMO/
Dermatology/
RH/PER

ASSOCIATE EDITOR

Dr. Sahana Varshni,
DMO/Psychiatry
RH/PER

भारत सरकार
रेल मंत्रालय
रेलवे बोर्ड, रेल भवन
रायसीना रोड, नई दिल्ली–110001
GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD, RAIL BHAWAN
RAISINA ROAD, NEW DELHI-110001

डॉ मान सिंह
महानिदेशक (रेलवे स्वा. सेवा)

Dr. Man Singh
Director General (RHS)

New Delhi, Dated 18th February, 2025

MESSAGE

I am delighted to bless the maiden e-magazine of Association of Physicians of Railways a platform dedicated to the Railway medical fraternity.

May this e-magazine serve as a beacon of knowledge, illuminating the paths of our doctors, and guiding them towards excellence in patient care.

May it foster a spirit of collaboration, innovation, and continuous learning among our medical community.

May it be a testament to the organization's commitment to the well-being of our patients and the advancement of medical science.

I offer my felicitation to the editorial team for undertaking this pioneering endeavor.

May it flourish and grow, benefiting our doctors, patients, and the medical community at large.

Best wishes for success of the venture.

(Dr. Man Singh)

Room No. 1, Fourth Floor, Railway Offices Complex (COFMOW), Tilak Bridge, New Delhi 110002.
Tel: 011-47843130 E-Mail : dgrhs@rb.railnet.gov.in

भारत सरकार / GOVERNMENT OF INDIA
रेल मंत्रालय / Ministry of Railways
दक्षिण रेलवे / Southern Railway

R.N.SINGH
General Manager

महाप्रबंधक कार्यालय / General Manager's Office
चेन्नै / Chennai - 600 003.

MESSAGE

"Association of Physician of Railways" is introducing an e-magazine for physicians, a platform for sharing the knowledge on latest advances in healthcare within medical community. I am happy to release the first edition of this e-magazine today. The contents of this magazine will be a testament to the hard work, dedication of our doctors working in the field of medicine.

I am sure that this e-magazine will turn out to be an apt forum for sharing and dissemination of valuable experiences, latest research and innovative practices in the medical field and help serve the best interests of Society & Patients.

As we embark on this new chapter, I urge all of you to contribute regularly towards enriching this magazine further.

I congratulate the Team members involved in this special initiative.

(R.N.Singh)
General Manager

Dated: 26th Feb. 2025.

दूरभाष / Tel: 044-2533 2157
फैक्स / Fax: 044-2533 1765
E-mail : gm@sr.railnet.gov.in

सत्यमेव जयते
भारत सरकार / GOVERNMENT OF INDIA
रेल मंत्रालय / MINISTRY OF RAILWAYS
दक्षिण रेलवे / SOUTHERN RAILWAY

Dr. C.M. RAVI, M.D. (Dermatology)
Principal Chief Medical Director

4th Floor, Moore Market Complex,
Park Town, Chennai - 600 003.

03.03.2025

MESSAGE

It is a matter of pride that Southern Railway is organizing RAPICON, 2025 – the Annual Conference of Physicians of Indian Railways. The two-day Conference is being conducted by the Department of General Medicine of Southern Railway Headquarters Hospital, Perambur, Chennai on the 7th & 8th March, 2025.

The theme for the Conference – **"Technological transformation in Medicine – Navigating the new Frontier"** has been very aptly coined as it has got much relevance to today's world. Recent advancement in technology has transformed healthcare system particularly in the diagnosis and management. Cost effective innovative treatment is going to help a long way. Involvement of Artificial Intelligence in health care is a big boon for health care delivery. However, there are few challenges related to data management, data privacy and equitable access to be addressed in the benefits of technology in healthcare.

Artificial Intelligence, Telemedicine and Electronic Health Record are some of the vital aspects of technological transformation in the field of medicine. The introduction of HMIS Application in Indian Railways is also a technological transformation in health care services provided to the beneficiaries.

The various sub-specialities of Medicine have been selected based on the past experience and theme, which is going to benefit all the delegates who are going to attend the conference.

I extend my greetings and best wishes to the organisers as well as to the delegates and wish RAPICON, 2025, a grand success.

With kind regards,

(डॉ.सी.एम.रवि/Dr. C.M. Ravi)
प्रधान मुख्य चिकित्सा निदेशक
Principal Chief Medical Director

Railway : 20350, Mob. : 9003160500, 9972766501
e-mail : cmd@sr.railnet.gov.in | drcmravi50@gmail.com

MESSAGE FROM PCMD/RH/PER

DR. KALYANI SAI DHANDAPANI,
PRINCIPAL CHIEF MEDICAL DIRECTOR,
RAILWAY HOSPITAL,
PERAMBUR.

It is my great pleasure to welcome you all to RAPICON 2025, the annual conference of the Railway Association of Physicians of India, being held on March 7th and 8th at the Southern Railway Headquarters Hospital, Chennai.

This year's theme, "Technological Transformation in Medicine – Navigating the New Frontier," is particularly relevant to our community of railway physicians. As we continue to serve the healthcare needs of our railway family, we must also stay abreast of the rapid technological advancements that are transforming the medical landscape.

From artificial intelligence and machine learning to telemedicine and electronic health records, technology is revolutionizing the way we practice medicine. However, this new frontier also presents challenges and opportunities that require careful navigation.

Our primary goal remains focused on building a robust and supportive professional medical community within Indian Railways. Collaboration, learning and networking are the corner stones upon which we aim to construct a stronger, more cohesive healthcare ecosystem.

As we embark on this enriching journey together, I encourage all participants to engage actively, share insights generously and forge connections that will undoubtedly contribute to our collective growth.

Through RAPICON 2025, we aim to bring together experts from across the country to share their insights and experiences on the intersection of technology and medicine. Our goal is to equip our railway physicians with the knowledge, skills, and expertise needed to harness the power of technology and improve patient outcomes.

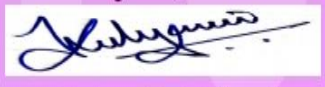
Over the next two days, we will engage in thought-provoking discussions, debates, and workshops that will explore the latest trends, innovations, and best practices in medical technology. We will also have the opportunity to network with colleagues from across the Indian Railways and share our own experiences and successes.

I would like to extend my heartfelt gratitude to our organizing committee, speakers, and delegates for their contributions to RAPICON 2025. I am confident that this conference will be a resounding success and will inspire us all to navigate the new frontier of technological transformation in medicine. Let us make this gathering a shining tribute to our dedication towards railway employee's health and advancement of medical expertise for our esteemed railway beneficiaries.

Let us come together to explore, learn, and grow as a community of railway physicians.

Welcome to RAPICON 2025!

Warm Regards,



Dr. Kalyani Sai Dhandapani,
Principal Chief Medical Director
Railway Hospital/Perambur.
DGO/DNB (OBG)/MNAMS (OBG)

भारत सरकार / GOVERNMENT OF INDIA
रेल मंत्रालय / Ministry of Railways
दक्षिण रेलवे / Southern Railway

Dr.V. KANNAN
MEDICAL DIRECTOR

OFFICE OF THE MEDICAL DIRECTOR
CHENNAI-600 023.

MESSAGE

We are excited to introduce an e-magazine by the **Association of Physicians of Railways**, designed to serve as a common platform for sharing the latest advancements in healthcare within our medical community. This initiative will showcase interesting cases that we encounter during our daily practice and highlight the newest developments in the field of medicine.

The contributions to this e-magazine will significantly enrich our knowledge-sharing efforts, enabling us to better understand the needs of our railway workers and their beneficiaries. By staying informed about the latest medical practices and insights, we can provide even better care and service.

I would like to extend my heartfelt congratulations and appreciation to the team members for their active involvement in bringing this new venture to life. Your dedication and collaboration will undoubtedly make this e-magazine a valuable resource for all.

Dated: 28th Feb 2025.

Dr. V.KANNAN
MEDICAL DIRECTOR

DR RADHA VIJAYARAGHAVAN
HOD OF MEDICINE& NEPHROLOGY,
ADDITIONAL CHIEF HEALTH DIRECTOR,
ORGANISING CHAIRMAN, APRCON 2025
RAILWAY HOSPITAL, PERAMBUR

Message

- It gives me immense pleasure to welcome the distinguished delegates of "RAPICON 2025 - the annual national conference of physicians of railways. The theme of the conference "Technological Transformation in Medicine – Navigating the New Frontier" has been carefully chosen to empower the delegates to get updated on the latest technological advancements. The pros and cons of the rapid advancements and relevance to the railway beneficiaries will also be discussed.
- In today's fast-paced world, communication and collaboration are the key to staying ahead of the curve. Conferences such as these showcase the latest developments in the medical field, highlight the achieved accomplishments, and provide a space for meaningful dialogue among peers.
- The collective mission to improve patient care and advance medical knowledge remains at the heart of all medical activities. With the support and contributions of all the brilliant professionals within the railway physicians' association, this conference will serve as a vital resource in helping physicians to network and collaborate. My best wishes to the railway physician's organisation to achieve greater academic heights and spread medical knowledge. I congratulate the E magazine of southern railway headquarters hospital in bringing out this "RAPICON special edition 2025".

V. Radha

01.03.2025

Dr Radha Vijayaraghavan

Dr. K. MURUGANANDAM, .IRHS
M.D. (GM), DNB (GM).
Addl. CHIEF HEALTH DIRECTOR

Headquarters Hospital,
Southern Railway,
Ayanavaram,
Chennai - 600 023.
Mobile : 90031 60510

Date 03-03-2025

It is my pleasure to welcome you to RAPICON 2025, the flagship conference of the Association of Physicians of Railways. As the Organising Secretary, I am honored to have played a role in bringing together this esteemed gathering of healthcare professionals.

Our theme, "Technological Transformation in Medicine – Navigating the New Frontier," reflects our commitment to embracing innovation and harnessing technology to improve patient outcomes. Over the next two days, we will engage in thought-provoking discussions, debates, and workshops that will explore the latest trends, innovations, and best practices in healthcare.

I extend my heartfelt gratitude to our esteemed guests, speakers, delegates, and sponsors for their participation and support. Your presence has made RAPICON 2025 a resounding success.

I also acknowledge the tireless efforts of our organising committee, volunteers, and team members who have worked diligently to make this conference a memorable experience.

As we navigate the new frontier of healthcare together, I hope that RAPICON 2025 will inspire you to think differently, challenge the status quo, and strive for excellence in all that you do.

Thank you once again for being part of RAPICON 2025.

Best regards,

03/03/2025

Dr.K.Muruganandam
Organising Secretary, RAPICON 2025

Salute to a Stalwart

My first Bypass in India – Padma Shri Dr. K. M. Cherian

On June 1, 1975, just a week after returning from Sydney, I resumed work as an adhoc medical officer at Southern railway hospital, Perambur. After completing routine cardiac procedures, I encountered a 43-year-old railway worker, Khaja Mohideen, who suffered severe coronary artery disease with 99% blockage in the left anterior descending artery (LAD). Given his symptoms, I scheduled India's first coronary artery bypass grafting (CABG) for June 6.

With limited resources—no cardiac catheterization lab, no proline sutures, cardioplegia, or cold light—we improvised. We used a heart-lung machine gifted by Dr. Harry Windsor, a locally-made heat exchanger, and diathermy from the railway workshop. My team, unfamiliar with CABG, included drs. M. Shankaran and Prem Kumar as assistants, drs. K.N. Reddy and T.J. Cherian as perfusionists, and Dr. Kalyan Singh as the anesthesiologist. Despite these challenges, the surgery proceeded smoothly, completed by 11 A.M., With the patient extubated the same evening. He was discharged on the 15th postoperative day and later retired in good health.

Despite its historic significance, my paper on this landmark surgery faced resistance at the 1975 conference of cardiothoracic surgeons and cardiologists of India. Initially denied a presentation slot, it was only through the intervention of Dr. Sujoy Roy and Dr. Senthilnathan that I was allowed to present. Dr. Roy introduced me, stating, *"the man who performed the first CABG in this country was denied a chance to present his paper yesterday. It is my proud privilege to call upon him today."* My presentation was met with a standing ovation, marking a turning point in Indian cardiac surgery.

FROM THE EDITOR'S DESK

Dr. D. Senkadhir Vendhan/DMO/
Dermatology/RH/PER
Editor-in-Chief

It is with immense pride and heartfelt gratitude that I present to you the e-souvenir of **RAPICON 2025**, a multidisciplinary conference hosted at the prestigious **Southern Railway Headquarters Hospital, Perambur**. This conference stands as a testament to the collaborative spirit and commitment to excellence that defines our institution and the broader medical community.

On behalf of the entire editorial team, I extend our deepest thanks to **Dr. C.M. Ravi, PCMD/SR**, **Dr. S. Kalyani, PCMD/RH/PER**, and **Dr. V. Kannan, MD/RH/PER** for entrusting us with the honor and responsibility of bringing this e-souvenir to life. Their guidance and encouragement have been the cornerstone of this endeavor.

Rapicon 2025 celebrates the confluence of diverse disciplines, fostering dialogue, innovation, and learning among professionals from varied fields. This e-souvenir highlights the dedication and passion of the contributors, researchers, and practitioners who continue to push the boundaries of knowledge and practice.

I take this opportunity to express my **sincere thanks** to the entire editorial team, our committed contributors, and the ever-supportive IT team. Your relentless enthusiasm, creativity, and hard work have made this vision a reality. Together, we have curated a collection of articles, insights, and reflections that mirror the vibrancy and depth of this multidisciplinary gathering.

As you turn through the pages of this e-souvenir, I hope it serves as a source of inspiration and knowledge, reflecting the spirit of **RAPICON 2025** — a celebration of innovation, collaboration, and progress.

With warm regards,
Editor-in-Chief,
E-Magazine,
Rapicon 2025
Southern Railway Headquarters Hospital, Perambur

RAPICON 2025

TECHNOLOGICAL TRANSFORMATION IN MEDICINE
NAVIGATING THE NEW FRONTIER

HOSTED BY:

Southern Railway Head Quarters Hospital
& IMA-Southern Railway Branch

VENUE: Dr. B.R.AMBEDKAR ARANGAM, CHENNAI-600038

7th & 8th |**MARCH**|2025

RAPICON 2025

TECHNOLOGICAL TRANSFORMATION IN MEDICINE NAVIGATING THE NEW FRONTIER.

Advancements in technology has transformed healthcare, revolutionizing diagnostic strategies and management practices. Innovation is a dynamic process that is greatly influenced by a close interaction between developers and users. High-technology medical care has been viewed both as a curse and blessing because of its capacity to consume an ever-increasing share of resources and the wonders it works in the diagnosis and treatment of disease. However, challenges related to data management, cybersecurity, data privacy and equitable access must be addressed to maximize the benefits of technology in healthcare.

The theme of this national level "Railway Association Physicians of India Conference (RAPICON 2025) is "Technological transformation in medicine – Navigating the new frontier". By embracing technological advancements, healthcare professionals can provide more efficient, personalized, and accessible care, leading to improved patient outcomes and enhanced healthcare delivery.

The topics in various subspecialities of medicine have been selected based on the above theme. The deliberations strive to highlight utility of these technological advances to Railway Beneficiaries in a cost effective manner. The perils surrounding undue dependence on technology with lesser utilisation of basic clinical skills and concepts is also real. Skilful navigation through this technological maze to maximize patient outcomes is vital and forms the foundation of precision medicine and would be brainstormed in this national forum.

RAPICON 2025

Chief Patron	Dr.Man Singh, DG/RHS/Railway Board
Patron	Dr.M.Ravindran, PED/Health/Railway Board Dr.C.M.Ravi, PCMD/SR
Chief Org. Chairman	Dr.S.Kalyani, PCMD/RH/PER
Organising Chairman	Dr.V.Kannan, MD/RH/PER Dr.Radha Vijayaraghavan, ACHD/RH/PER
Organising Secretary	Dr.K.Muruganandam,ACHD/RH/PER
Treasurer	Dr.G.Arun Kumar,Sr.DMO/RH/PER
Scientific committee	Dr.Radha Vijayaraghavan, Dr.K.Muruganandam, Dr.G.B.Vidyashankari, Dr.V.S.Shanthi, Dr.K.Jayasudha, Dr.S.Ragavendra, Dr.G.Arun Kumar, Dr.Ninu.P.Babu

RAPICON 2025

SCIENTIFIC PROGRAMME

07.03.2025 - DAY 1 SCHEDULE

TIME	PROGRAMME
08:00 am - 08:30 am	Registration of Delegates and Breakfast
08:30 am - 08:45 am	Increasing influences of technology in medicine Pros & Cons **Dr. G.B.Vidyashankari**
08:45 am - 09:00 am	Snooze or Lose: Managing OSA **Dr.G.Arunkumar**
09:00 am - 09:15 am	Navigating new frontiers in Nephrology **Dr.Radha Vijayaraghavan**
09:15 am - 09:30 am	Heart of the Matter - What's new in Cardiology? **Dr.P. V. Thanuja**
09:30 am - 10:00 am	Dr Phanidhar oration – Clinical Core and Technological Edge **Dr. V. S. Shanthi**
10:00 am - 10:20 am	Newer nuances in Neurology - Efficacy & Safety of Ocrelizumab for MS and treatment overview **Dr.Arun Saravanan**
10:20 am - 10:35 am	From Fragmented to Integrated Care - The Power of Multiorgan Monitoring **Dr.K.Jayasudha**
10:35 am - 11:30 am	**Inauguration Ceremony**
11:30 am - 11:45 am	**Tea Break**
11:45 am - 12:15 pm	RAPICON oration - One Health for all Nephrologist perspective **Dr. N.Gopalakrishnan**
12:15 pm - 01:00 pm	Panel discussion on IRMM update **Dr.Sushma Matey, Dr.K.Satya Babu, Dr.Radha Vijayaraghavan, Dr.S.Senthil Kumar, Dr.Arun Saravanan**
01:00 pm - 01:20 pm	Breathing New Life - Advances in Lung Transplantation **Dr.Soumitra Sinha Roy**
01:20 pm - 02:10 pm	**Lunch**
02:10 pm - 02:30 pm	Breaking Barriers in BP Control: The Latest Advances in Hypertension Management **Dr.Dorairaj Prabakaran**

RAPICON 2025

SCIENTIFIC PROGRAMME

07.03.2025 - DAY 1 SCHEDULE

TIME	PROGRAMME
02:30 pm - 02:50 pm	Shingles Prevention - Time is now **Dr.Subramanian Swaminathan**
02:50 pm - 03:10 pm	Prevention and palliation - Geriatric care **Dr.K.Uma Kalyani**
03:10 pm - 03:30 pm	Beyond the Basics: What's new in Lipid Management & Cardiovascular Risk Reduction **Dr.B.Vinod Kumar**
03:30 pm - 03:45 pm	**Tea Break**
03:45 pm - 04:05 pm	Early Detection and Molecular Biomarker testing for Therapeutic Prediction of Lung cancer **Dr.B.Suresh Kumar**
04:05 pm - 04:25 pm	HIF - PHIs for the Treatment of Anemia : Ready or Not? **Dr.Savita Gangurde**
04:25 pm - 04:55 pm	Game changing innovations in diabetes management Symposium **Dr.K. Muruganandam, Dr.M.Ullaganathan, Dr.V. Muralikrishnan**
04:55 pm - 05:15 pm	Ventricular Premature Beats When to treat? **Dr.S.B.Gupta**
05:15 pm - 05:35 pm	Revolutionizing Psoriasis treatment - The biological era **Dr. Senkathirvendhan**
05:35 am - 05:45 am	The Smart Ward **Dr. Kumaresh**
05:45 pm onwards	**GBM** - Association of Physicians of Railways

Banquet Dinner with Cultural Extravaganza

Venue: Sterling Club, Nungambakkam, Chennai- 600034.

Date: 07.03.2025 Time: 7pm onwards

RAPICON 2025

SCIENTIFIC PROGRAMME

08.03.2025 - DAY 2 SCHEDULE

TIME	PROGRAMME
07:30 am - 08:00 am	Breakfast
08:00 am - 09:00 am	Free paper Presentation session
09:00 am - 09:20 am	Hormonal Harmony: The Key to Women's Health & Wellness **Dr. Adlyne Reena Aseervatham**
09:20 am - 09:40 am	Role of Trastuzumab Deruxtecan in HER2 expressing Tumor **Dr.Rejiv Rajendranath**
09:40 am - 10:00 am	Thriving in Menopause - Strategies for a healthy transition **Dr. S.Kalyani**
10:00 am - 10:20 am	New Horizons in the treatment of Adult Transfusion dependent Beta Thalassemia Patients **Dr.Karthik Kumar**
10:20 am - 10:40 am	Basics of Lungs Cancer & Immunopherapy **Dr.Rejiv Rajendranath**
10:40 am - 11.00 am	Rheumatology - Recent advances **Dr.Ravichandran**
11:00 am - 11.15 am	Tea Break
11:15 am - 11:35 am	The Bug Stops Here: Combating Antimicrobial Drug Resistance **Dr. Senthur Nambi**
11:35 am - 11:55 am	Digital Doctor - Hope or Hype? **Dr.K.Satya Babu**
11:55 am - 12:10 pm	Gut Instincts: Revolutionizing Interventional Gastroenterology **Dr.S.Raghavendra**
12:10 pm - 12:25 pm	From Diagnosis to Cure: Latest Advances in Tuberculosis Management **Dr.Ninu.P.Babu**
12:25 pm - 12:40 pm	Bond with your bones - Advances in Osteoporosis **Dr.Nazneen**
12:40 pm - 01:00 pm	New Horizons in the treatment of low risk Myelodysplastic syndrome **Dr.Anitha Ramesh**
01:00 pm - 01:30 pm	Tirzepatide - A Novel GIP/GLP1 RA **Dr. Vijayabaskar Reddy**
01:30 pm onwards	Valedictory function & LUNCH

DEPARTMENT OF GENERAL MEDICINE
HOST OF RAPICON 2025

INDEX

DEPARTMENT OF GENERAL MEDICINE

DISSEMINATED MELIOIDOSIS IN A YOUNG MALE - A RARE PRESENTATION

-Dr. V S Shanthi, Dr. Muruganandham, Dr. G Arun Kumar

INTRODUCTION: Melioidosis is rare infection caused by gram-negative bacterium *Burkholderia pseudomallei.* It manifests from asymptomatic disease to localised infection to disseminated infection. It is commonly found in soil and fresh water and transmitted through- inoculation, inhalation, aspiration and ingestion. The major risk factors are Diabetes, Alcoholism and underlying chronic diseases. The Mortality of the disease is44% (disseminated disease – 90%) [1,2]

CASE REPORT:

A 30 year old male track man by occupation known case of type 1 diabetes mellitus and chronic alcoholism presented with High grade Fever with chills for 5 days and Abdominal pain with low back pain , Bilateral knee and ankle pain.

On examination patient was febrile, pallor present, Vitals was stable Bilateral knee and ankle - swelling with tenderness present

- Abdomen - tenderness present over left hypochondriac region
- Digital rectal examination- tender prostate with areas of fluctuation

Blood investigations showed Normal total counts with Anaemia and Thrombocytopenia and deranged LFT and RFT.

DISSEMINATED MELIOIDOSIS IN A YOUNG MALE - A RARE PRESENTATION

CECT ABDOMEN:

- *SPLEEN* - Multiple hypodense Lesion s/o ABSCESS
- *PROSTATE* - Few hypodense poorly enhancing lesions

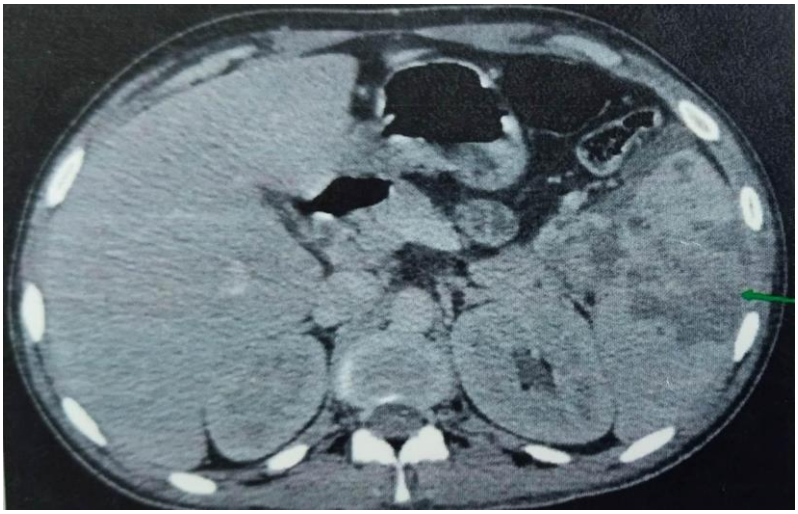
CT CHEST - Multiple small nodules of varying size in both lungfields CEMRI SPINE & PELVIS :

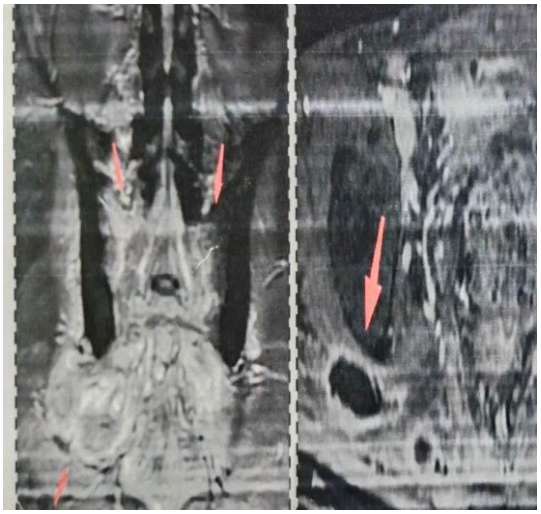
- Lytic lesions - Bilateral sacrum
- Diffuse muscular edema involving bilateral pyriformis, erectorspinae and right gluteal muscles.

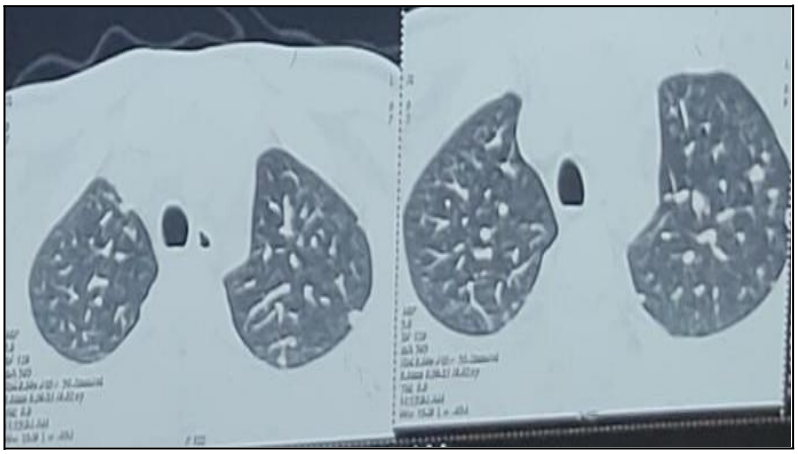
2D ECHO (after 15 days of admission) – Healed vegetations in Mitral valve

CULTURES:

Blood culture, splenic aspiration & prostatic aspiration cultures grew
Burkholderia pseudomallei.







SOUTHERN RAILWAY HEADQUARTERS HOSPITAL, PERAMBUR, CHENNAI-23
DEPARTMENT OF LABORATORY MEDICINE
DEPARTMENT OF MICROBIOLOGY

Patient Name	: Mr.SUGUMAR	Order No	: RH681316
Sex / Age	: Male /31 Y /0 M /0 D	Registered On	: 22/05/23 11:05PM
MIC No	: 28031601	Collected On	: 22/05/23 11:05PM
Ward	: M.Med Wd	Reported On	: 25/05/23 12:40PM
Doctor	: ,	Printed On	: 25/05/23 12:41PM
Report Status	: Final	Page No	: 1 of 1

BACTERIOLOGY TEST REPORT

Specimen Type : drained pus

Culture Report

		Methodology
Organism Name	: Burkholderia pseudomallei	Aerobic Bacterial Culture
Colony Count	:	
Antibiotic sensitivity	:	Disk diffusion Method

ANTIBIOTIC NAME	MIC	INTERPRETATION
Ceftazidime		Sensitive
Levofloxacin		Sensitive
Meropenem		Sensitive
Minocycline		Sensitive
Trimethoprim/Sulfamethoxazole		Sensitive

Comments/Observation : Additional report is awaited.

MANAGEMENT:

INTENSIVE PHASE:

- Inj Ceftazidime avibactam 2 g iv TDS for 2 weeks
- Inj Meropenem 1g iv TDS for 4 weeks

ERADICATION PHASE:

- Tab Cotrimoxazole DS BD for 3 months

FOLLOW-UP:

USG ABDOMEN At 3 and 9 months – Complete resolution of

Abscess 2D ECHO After 9months- No obvious vegetations

CT CHEST- complete resolution of nodules

DISCUSSION: Although melioidosis can be asymptomatic or mild, it can also develop multiple abscesses, dissemination and sepsis with high mortality. Thus, it may require a multidisciplinary approach, antibiotic coverage and necessary intervention

REFERENCE:

1- Lancet.2003;361(9370):1715

2- Melioidosis Reference Manual- American Society for microbiology.

DEPARTMENT OF MEDICAL GASTROENTEROLOGY

NEWER MEDICAL GASTROENTEROLOGY INSIGHTS

DR S RAGAVENDRA MD,DM (MGE) Sr DMO MGE RH/PER

- 63 Yo F,
  - K/C/O Cervical squamous intraepithelial neoplasm (s/p Vaginal Hysterectomy in April 2024),
  - Type 2 diabetes, Hypertension, ILD and CKD stage 1
- C/O - Dysphagia grade 1 and significant weight loss (5 kgs in one month)
- No history of abdominal pain, vomiting, melena, jaundice or fever.
- General Examination – Conscious, oriented, comfortable at rest
- PICCLE – Negative
- System Examination – WNL

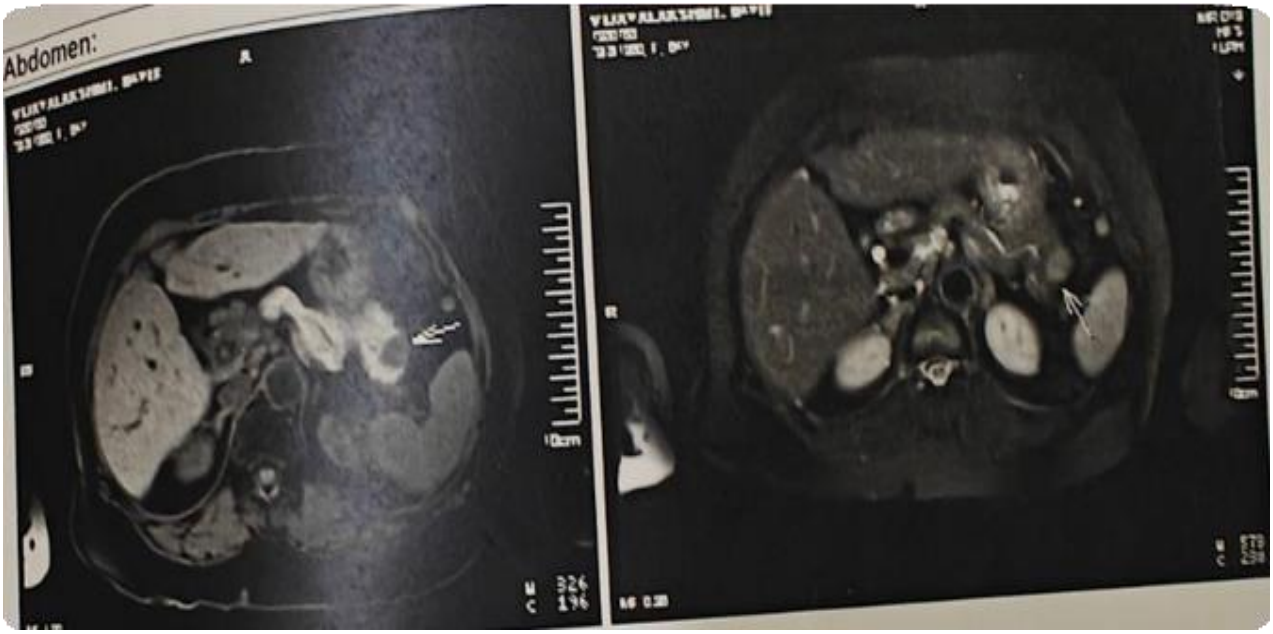
MRI Abdomen – (5/03/24)

Small well defined lesion measuring 16*14mm in the distal tail of pancreas in the inferior aspect. No calcification or necrosis. No Peripancreatic inflammation. No ductal dilatation. No communication with main pancreatic duct. Lesion has signal intensity similar to splenic parenchyma on all non contrast sequences.

IMPRESSION : To r/o pancreatic accessory spleen/ ? neoplasm

Hb	11.5
TC	9800
DC	73/20/1.2
Plt	1.6L
TB	0.7
DB	0.2
AST	14
ALT	13
SAP	38

CEA	4.G5
CA 125	29.7
CA 1G-G	87
C PEPTIDE	2.71
UREA	47
CREATININE	1.1
Sodium	136
Potassium	3.5
PT	12
INR	1.06



WHOLE BODY FDG PET CTSTUDY:

1 Metabolically active lymph nodes in right supraclavicular, mediastinal and hilar, axillary, upper abdomen and retro peritoneal regions

Possibilities include –

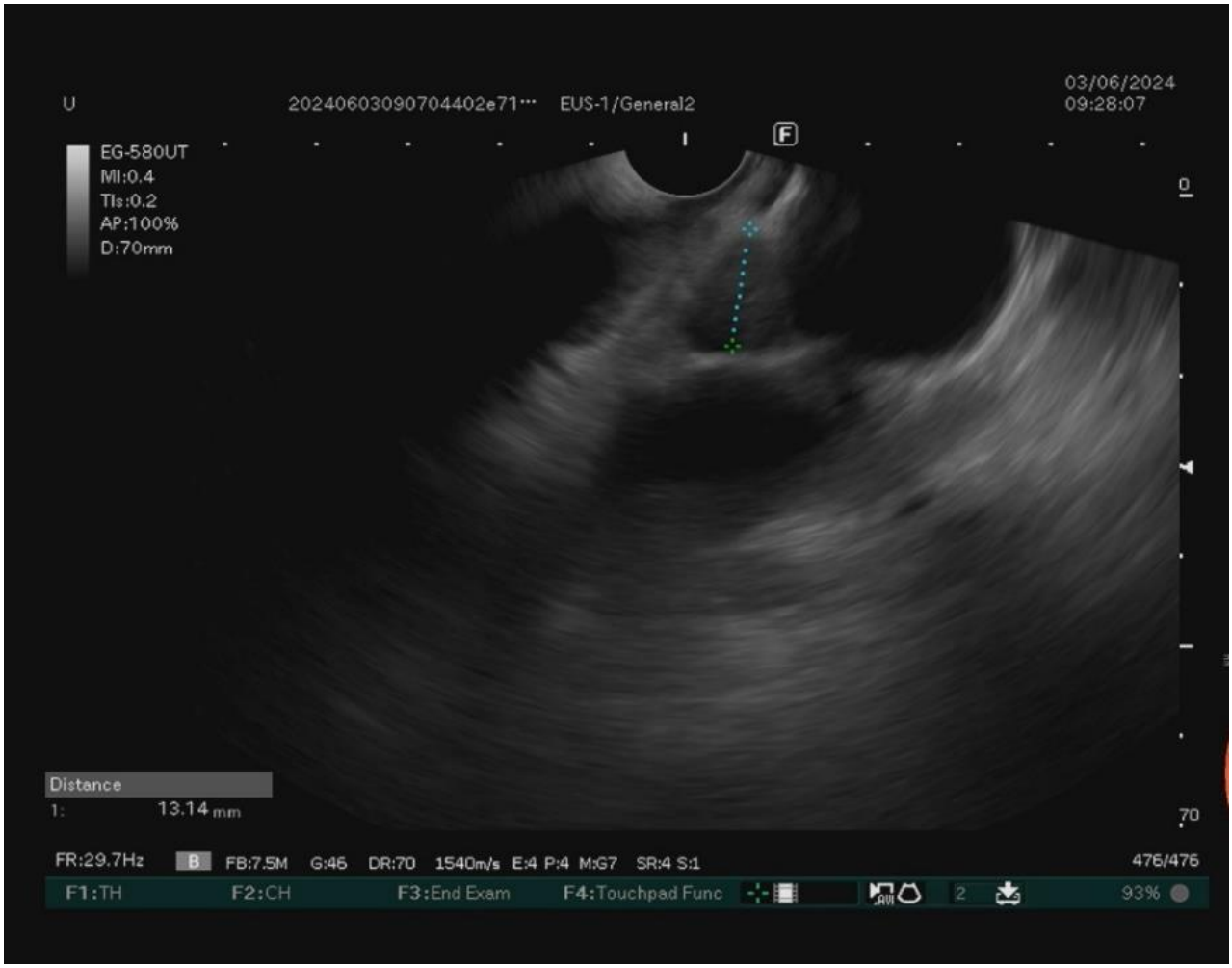
1. Inflammatory /infective etiology
2. Lymphoproliferative disorder

2-Honey combing with reticular septal thickening – suggestive of fibrosing ILD

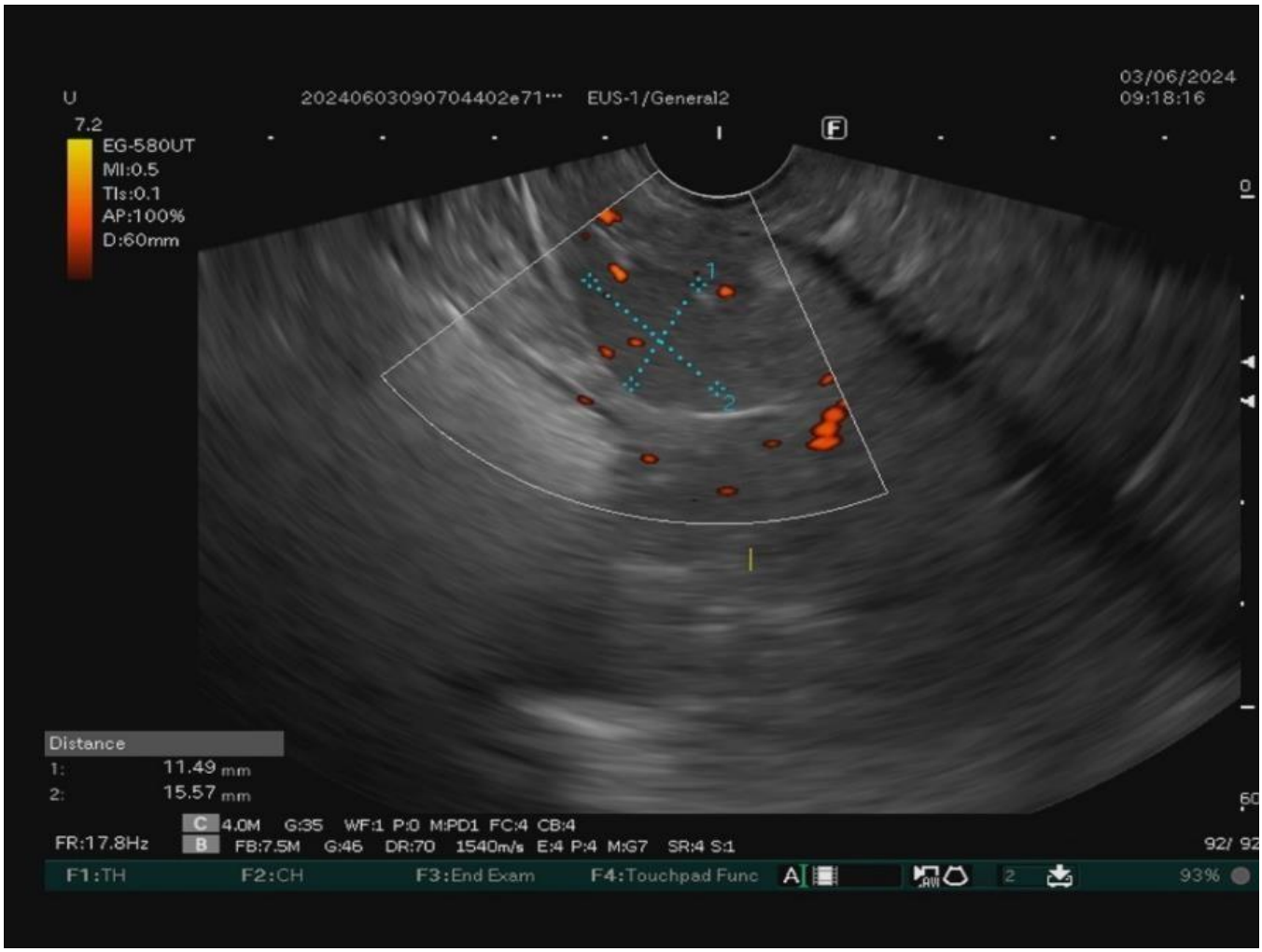
DIAGNOSIS

PANCREATIC TAIL SOL

- Patient underwent ENDO USG +Biopsy
- 2.5 x 1.3 cm benign node seen in station 7.
- FNA obtained using 22 G ultra tip needle.
- Smear sent for cytology.
- Another 1.1 cm Node seen in station 4L(AP window).
- Central arterial doppler sign positive in both nodes.



1.3x1.7 cm hypoechoic mass seen in tail of pancreas, similar to splenic echogenecity; with internal vascularity. FNA done using 22 G Ultratip needle, by capillary suction method. Smear sent for cytology

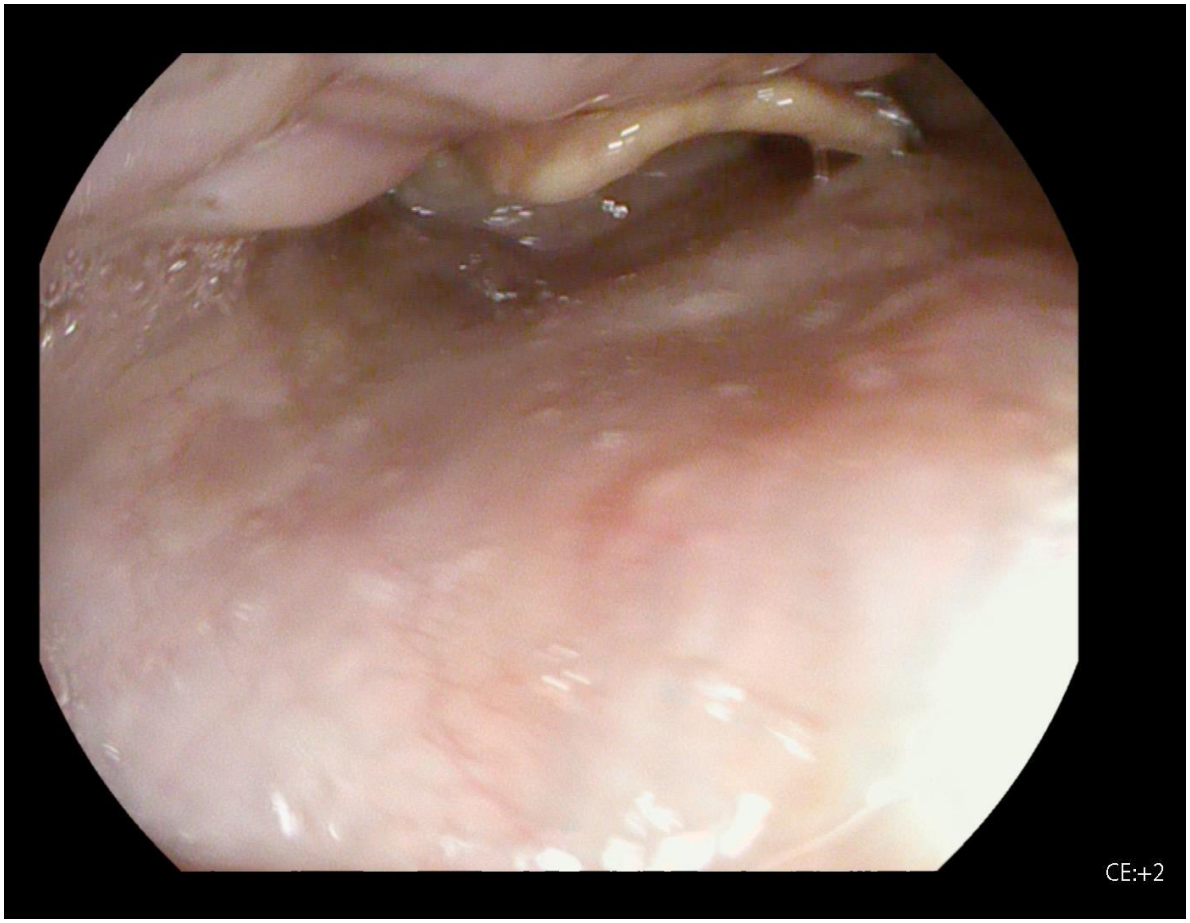


- **IMPRESSION :**
  - Mediastinal Lymphadenopathy-Benign-
  - Pancreatic Tail SOL - DD: Splenenculus, NET

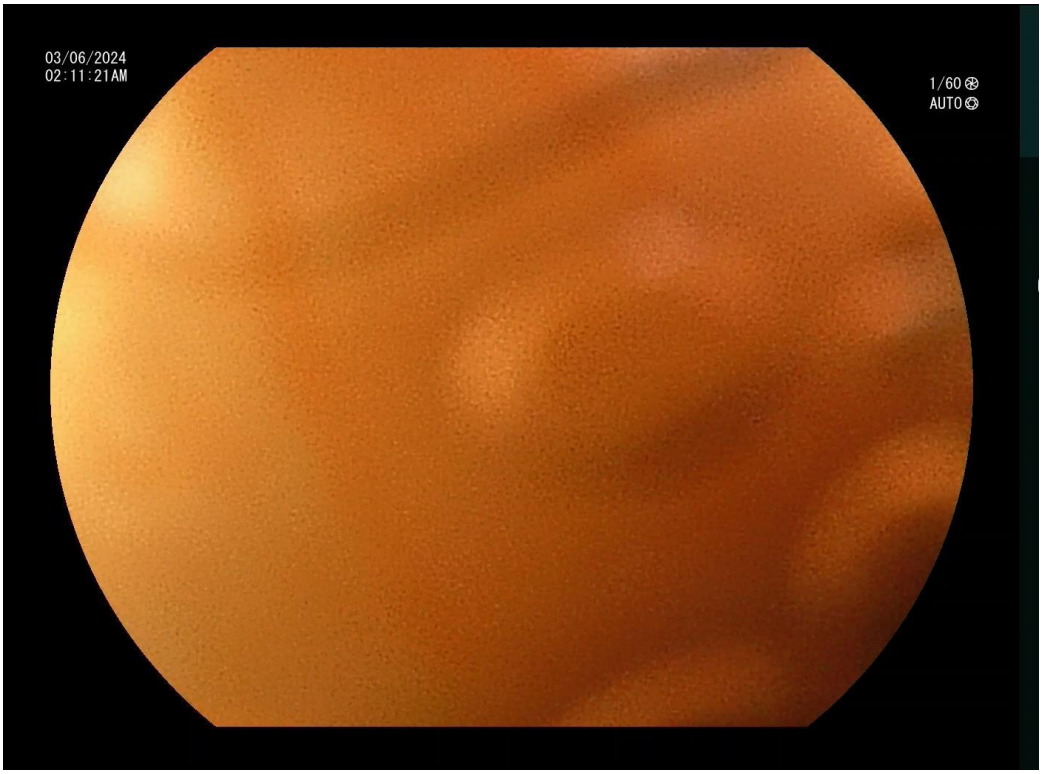
Case 2

- 71 Y/ F
- c/o dysphagia to both solids and liquids for 1 year
- Weight loss – 5kgs in 1 year
- Hemetemesis following retching – 2 epiodes
- Presented to ER and admitted

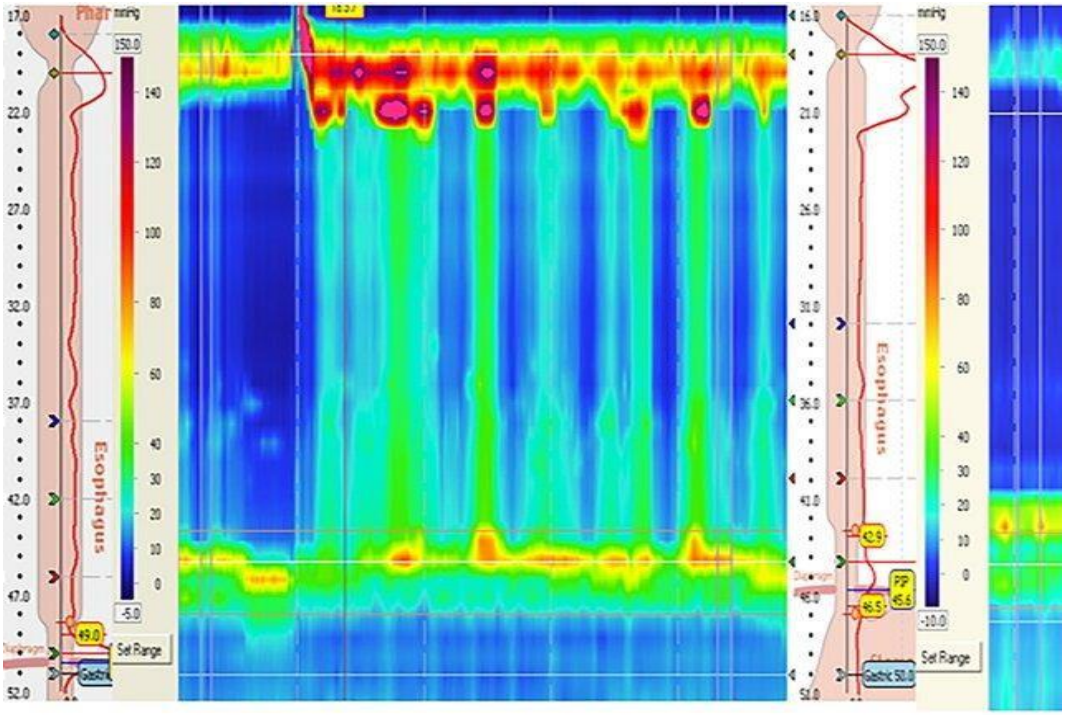
Underwent initial VOGD on 1st June 2024



Repeat endoscopy on 3rd June 2024



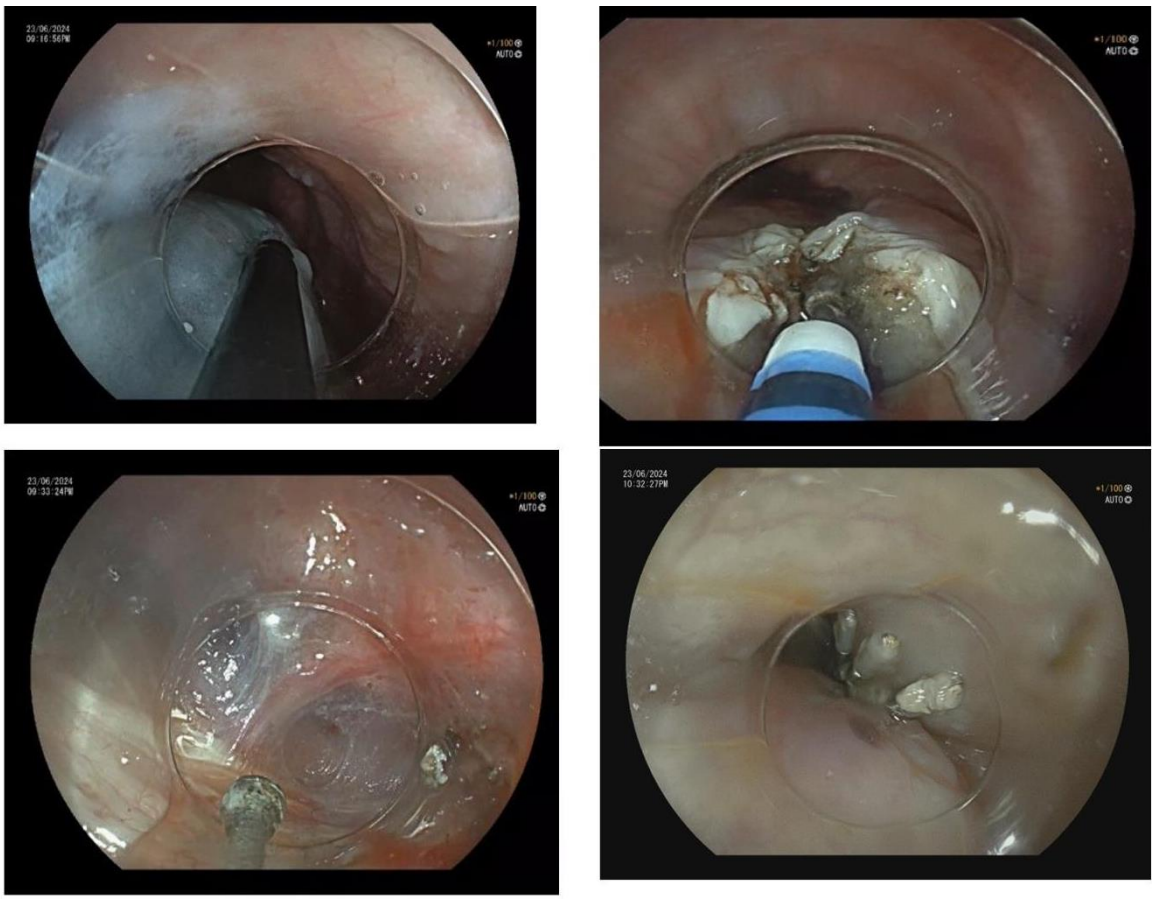
Oesphageal manometry



Type II

POEM PROCEDURE STEPS

- Submucosal Injection
- Use of hybrid knife to create a tunnel
- Submucosal dissection followed by myotomy
- Closure



INSIGHTS ON THE PROCEDURES PERFORMED IN THE DEPARTMENT OF MEDICAL GASTROENTEROLOGY

Dr Dr V.S.Shanthi, MD, DM, Chief Consultant

1. Upper GI Endoscopy (UGI Scopy) – 40 to 60 cases per month
2. Colonoscopy – 8 to 14 cases per month
3. Esophageal Variceal Band Ligation (EVBL) – 3 to 5 cases per month
4. N-Butyl Cyanoacrylate Glue Injection for Gastric Varices – 4 to 5 cases per year
5. Argon Plasma Coagulation (APC) for Portal Hypertensive Gastropathy, Radiation proctitis etc. - 6 to 10 cases per year
6. Injection Therapy for Bleeding Gastric or Duodenal Ulcers – 6 to 8 cases per year
7. Polypectomy for Colonic or Gastric Polyps – 8 to 10 cases per year
8. Esophageal Stricture Dilation for corrosive strictures using Savary-Gilliard dilators
9. Hemoclip Deployment for ulcer-related gastrointestinal bleeding
10. Rigiflex Balloon Dilation for Achalasia Cardia
11. Endoscopic Ryle's Tube Placement in cases where standard placement is not feasible

Advanced Endoscopic Procedures

1. Endoscopic Retrograde Cholangiopancreatography (ERCP) for:
   a. Biliary stone extraction via endoscopic sphincterotomy, with or without sphincteroplasty (balloon dilation of the papilla) prior to laparoscopic cholecystectomy
   b. Biliary stenting with plastic stents
   c. Pancreatic sphincterotomy and stenting with plastic stents
   d. Mechanical lithotripsy for large CBD stones
   e. Common bile duct (CBD) stricture dilation
2. Uncovered Self-Expanding Metal Stent (SEMS) for Malignant Esophageal Strictures
3. Hemospray Application for Diffuse Bleeding in Gastric Cancer
4. Capsule Endoscopy, Endoscopic Ultrasound (EUS) and Enteroscopy – Organized in government institutions for selected cases like unidenfied GI blood loss, pancreatic cyst, Crohn's disease etc

Interesting cases:

1. Argon Plasma Coagulation (APC) for actively bleeding Portal Hypertensive Gastropathy, Radiation proctitis etc since 2003
2. Rigiflex Balloon Dilation for Achalasia Cardia since 2004
3. Glue injection for large intragastric varices - first case in 2004
4. Endoscopic Mucosal Resection (EMR) for flat adenoma with dysplasia in ascending colon - 2012
5. Series of ERCPs since 2018
6. Fully Covered Self-Expanding Metal Stent (FcSEMS) deployed for Benign Biliary Stricture in 2018
7. Hypertransaminasemia in a cardiac pt – Rare cause – Coeliac disease detected in Feb 2021
8. Dress syndrome with hepatic encephalopathy in a young student due to Dapsone, treated successfully in Oct 2022
9. IDA with cutaneous markers – Osler Rendu Weber syndrome identified in in 2023
10. Endoscopic Band Ligation for auto amputation of Gastric Polyps - 2023
11. Deployment of Removable Danis Ella Stent for Massive Esophageal Variceal Bleeding refractory to band ligation or sclerotherapy - Feb 2024
12. Young male patient presented as GOO in Nov 2024 - Annular Pancreas detected in Dec 2024 and treated by Gastrojejunostomy

DEPARTMENT OF NEPHROLOGY

Double Jeopardy: Cutaneous Mucormycosis in a Renal Transplant Patient Post COVID-19

Dr Radha Vijayaraghavan, Dr GB Vidhyashankari, Dr Jayasudha.K

Abstract:

Fungal infection as a COVID-19 sequelae in Kidney Transplant Recipients (KTR) is scarcely reported. COVID-19 Associated Mucormycosis (CAM) in KTR presenting as cutaneous involvement is even rarer. This case report highlights this complication in a patient who underwent kidney transplant 17 years prior, was on triple immunosuppression with New Onset Diabetes After Transplant (NODAT) and had chronic graft dysfunction. The patient developed severe COVID-19 pneumonia necessitating parenteral steroids and developed a necrotic ulcer at the intravenous cannula site post-recovery. This was identified as *Rhizopus oryzae* and treated with de-escalation of immunosuppression, antifungals and meticulous wound debridement with a favourable outcome. The clinical associations seen in this case are unique and were not found in literature. This case report strives to encourage clinicians to evaluate for cutaneous mucormycosis in KTRs presenting in a similar clinical setting.

Key words:

Kidney transplant, Cutaneous, Mucormycosis, COVID-19, Immunosuppression, Sequelae

Double Jeopardy: Cutaneous Mucormycosis in a Renal Transplant Patient Post COVID-19

Introduction:

Mucormycosis has become an increasingly emerging fungal infection in renal allograft recipients on immunosuppression. It is caused by opportunistic fungi of the order *Mucorales*. Early diagnosis and treatment are vital to prevent mortality. Incidence of mucormycosis had increased during COVID-19 pandemic, though the causation and association between these two are poorly understood.[1] A rare case of a Kidney Transplant Recipient (KTR) (17 years post-transplant) who developed cutaneous mucormycosis as post COVID-19 sequelae is reported here.

Case Report:

A 52-year-old male, Mr. A, was admitted with fever, cough with mucoid expectoration for 7 days and breathlessness for 3 days. He had undergone ABO compatible living donor kidney transplant in 2005, with his mother as the donor. His native kidney disease was unknown and his haemodialysis vintage was 6 months. Injection Basiliximab was used as the induction immunosuppressant and Tacrolimus, Mycophenolate and Prednisolone were the maintenance immunosuppressants. He developed New Onset Diabetes after Transplant (NODAT) five years post-transplant and chronic graft dysfunction (serum creatinine of 1.5-1.8 mg/dl) ten years post-transplant.

On examination, Mr. A was breathless with mild hypoxia (88% SpO2 on room air) and few inspiratory crackles bilaterally. CT chest showed multifocal patchy central and peripheral ground glass opacities in all lobes. COVID-19 RT-PCR was positive. He was treated with nasal oxygen, supportive therapy and IV Dexamethasone, while mycophenolate was stopped. Tacrolimus dose was optimized to target trough level of around 5 ng/ml. He improved symptomatically and became COVID RT-PCR negative. However, he developed AKI on CKD with serum creatinine of around 3 mg/dl.

7 days after seroconversion, Mr. A developed a blister on the right forearm at the IV cannula site with redness and tenderness. The blister broke open forming an ulcer with blackish margins shown in Figure 1(a). Progressive increase in slough and necrosis with pus discharge was noted, illustrated in Figure 1(b). Pus and tissue from ulcer was sent for microbiologic analysis. Wound debridement and empirical broad spectrum antibiotic covering gram positive infection were instituted. Gram stain of pus showed aseptate fungal hyphae depicted in Figure 1(c). KOH mount confirmed presence of broad aseptate hyphae while lactophenol cotton blue stain showed right angle branching as shown in Figure 1(d). Evaluation to assess mucormycosis in other organ systems was negative. He was started on 5 mg/kg/day of injection Liposomal amphotericin B. Fungal culture showed dimorphic fungus with the species identified as *Rhizopus oryzae*. Oral posaconazole therapy was added to amphotericin, and therapy was given for a total period of 8 weeks. Wound debridement and thorough local dressing were continued. The wound completely healed after split-thickness skin grafting as seen in Figure 1(e). His serum creatinine returned to baseline values and mycophenolate was restarted later.

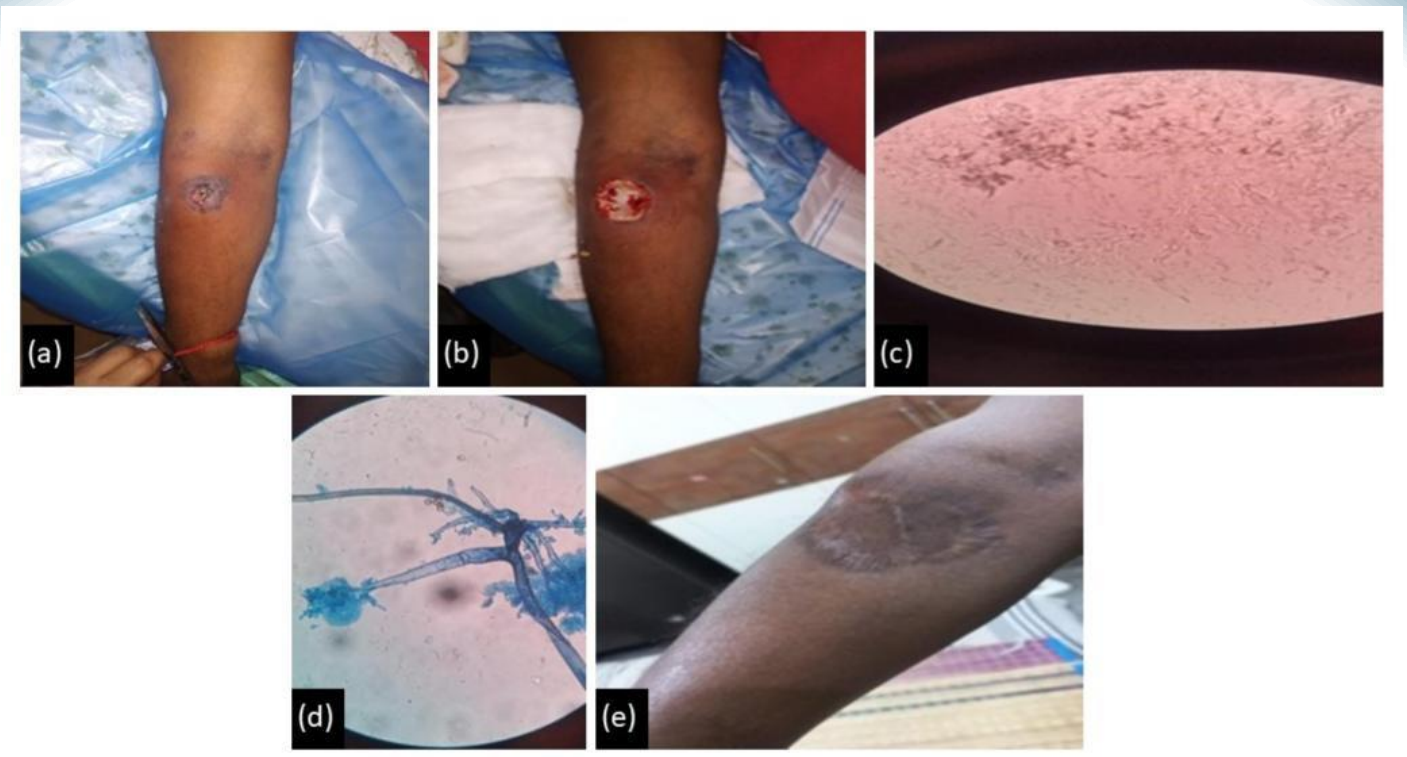


Figure 1: (a) Ulcer with blackish margins on the right forearm. (b) Wound showing slough. (c) Gram stain showing aseptate fungal hyphae. (d) Lactophenol cotton blue stain showing right angle branching. (e) Healed skin after split-thickness skin grafting

Discussion:

Mucormycosis is an angio-invasive fungal infection associated with high mortality, especially among immunosuppressed patients.[2] Cutaneous mucor has 2 clinical forms – Primary and Secondary. Primary mucor is characterized by cutaneous necrotic lesions where the fungus is usually inoculated by trauma. This form can get disseminated, if not treated early. Secondary mucor is a complication and extension of the rhino-orbito-cerebral variety with a poor prognosis. The most common clinical presentation of primary cutaneous mucor is induration of the skin with surrounding erythema which rapidly progresses to necrosis. The disease can present atypically as targetoid lesions, lesions mimicking tinea corporis, pyoderma gangrenosum leading to diagnostic dilemma.

Early detection can be achieved by direct KOH microscopic examination, observing the presence of aseptate, hyaline, hyphae, 5 µm wide and 20 - 50 µm long, with irregular branching at right angles. Fungal cultures performed on Sabouraud and potato dextrose agar media are positive in 72% to 89% of cutaneous mucor. A biopsy taken from the center of the lesion, including subcutaneous fat subjected to HPE and molecular testing is also diagnostic.

A multidisciplinary approach including extensive surgical debridement, antifungal therapy, correction of the underlying metabolic or impaired immunological status, and control of other concomitant infections is necessary to improve survival in cutaneous mucormycosis. Antifungal agent of choice is amphotericin B, though posaconazole and isavuconazole have been used in select cases.[3]

The multi-center prospective TRANSNET study reported a cumulative incidence of mucormycosis of 0.07% in Solid Organ Transplant Recipients at the end of one year.[4] A literature search on cutaneous mucormycosis following COVID-19 infection in KTR was remarkable for the paucity of cases indicating its rarity in this setting. A case of cutaneous mucor following cardiac transplant as COVID-19 sequelae has been reported. This patient developed cutaneous mucor 3 months post COVID-19 at the previous IABP insertion site. The lesion had burrowed into the thoracic cavity and sternal wound and patient died despite aggressive therapy.[5]

The first two cases of COVID-19 associated mucormycosis in KTR were reported from Spain in 2021, one being pulmonary mucor and the other mucor in skeletal muscle.[6] In another case series reported from Chennai, all five patients had rhino-orbito-cerebral involvement. All the subjects had NODAT, severe COVID-19 pneumonia, had received injection dexamethasone and developed acute graft dysfunction.[7] This is in line with the risk factors observed in Mr. A. In a single-center study in Ahmedabad on a similar population, risk factors like diabetes, level of immunosuppression, lymphopenia were noted.[8] Among the above discussed KTRs with fungal infection as COVID-19 sequelae, cutaneous mucormycosis was not observed, making Mr. A's case a rarity.

References:

1. Singh AK, Singh R, Joshi SR, Misra A. Mucormycosis in COVID-19: A systematic review of cases reported worldwide and in India. Diabetes & Metabolic Syndrome: Clinical Research & Reviews. 2021 Jul;15(4):102146. doi:10.1016/j.dsx.2021.05.019
2. Song Y, Qiao J, Giovanni G, Liu G, Yang H, Wu J, et al. Mucormycosis in renal transplant recipients: Review of 174 reported cases. BMC Infectious Diseases. 2017 Apr 18;17(1). doi:10.1186/s12879-017-2381-1

3. Kirushnan B, Balasubramaniyam R, Ramesh A, Jeevagan M, Balakrishnan V. Successful treatment of cutaneous mucormycosis after renal transplantation by debridement, liposomal amphotericin B, and Isavuconazole. Indian Journal of Transplantation. 2023 Oct;17(4):470–1. doi:10.4103/ijot.ijot_67_23
4. Pappas PG, Alexander BD, Andes DR, Hadley S, Kauffman CA, Freifeld A, et al. Invasive fungal infections among organ transplant recipients: Results of the transplant-Associated Infection Surveillance Network (transnet). Clinical Infectious Diseases. 2010 Apr 15;50(8):1101–11. doi:10.1086/651262
5. Khatri A, Chang K-M, Berlinrut I, Wallach F. Mucormycosis after coronavirus disease 2019 infection in a heart transplant recipient – case report and review of literature. Journal of Medical Mycology. 2021 Jun;31(2):101125. doi:10.1016/j.mycmed.2021.101125
6. Arana C, Cuevas Ramírez RE, Xipell M, Casals J, Moreno A, Herrera S, et al. Mucormycosis associated with Covid-19 in two kidney transplant patients. Transplant Infectious Disease. 2021 Jun 13;23(4). doi:10.1111/tid.13652
7. P V, Ravindran K, Solomon D, Shaji S, Kamalakannan G, Kannan BS, et al. Pos-801 COVID associated mucormycosis in kidney transplant recipients- a case series. Kidney International Reports. 2022 Feb;7(2). doi:10.1016/j.ekir.2022.01.837
8. Meshram HS, Kute VB, Chauhan S, Dave R, Patel H, Banerjee S, et al. Mucormycosis as SARS-cov2 sequelae in kidney transplant recipients: A single-center experience from India. International Urology and Nephrology. 2021 Nov 18;54(7):1693–703. doi:10.1007/s11255-021-03057-5

DEPARTMENT OF RESPIRATORY MEDICINE

PULMONARY RHEUMATOID NODULE: A RARE BUT SIGNIFICANT MANIFESTATION IN RHEUMATOID ARTHRITIS

DR NINU P BABU, DR THASLEEM BHANU, DR SAKTHIMURUGAN

A 67-year-old female presented to our respiratory medicine outpatient department with a three-month history of dry cough, right-sided chest pain, and shortness of breath. She had previously been treated at a local health clinic with multiple courses of antibiotics and cough syrup, but her symptoms showed no improvement. The patient had a known history of rheumatoid arthritis, diagnosed in 2015, with an initial rheumatoid factor of 8 IU. Her treatment regimen at that time included methotrexate 10 mg weekly, hydroxychloroquine 200 mg at bedtime, prednisolone 10 mg daily, and folic acid 5 mg daily. She continued this treatment until 2020, at which point she independently discontinued all medications.

Upon evaluation, a chest X-ray revealed a cavitary, non-homogeneous opacity in the right upper lobe. A subsequent high-resolution CT (HRCT) scan of the thorax demonstrated cavitating consolidation with an air bronchogram in the apical segment of the right upper lobe and the superior segment of the right lower lobe, along with focal consolidation in the right upper lobe apical segment. Additionally, focal ground-glass opacities were observed in the left lower lobe and anterior basal segments, raising concerns for an infective etiology and prompting investigation for tuberculosis.

PULMONARY RHEUMATOID NODULE: A RARE BUT SIGNIFICANT MANIFESTATION IN RHEUMATOID ARTHRITIS

The patient underwent bronchoscopy, and bronchoalveolar lavage (BAL) bacterial culture grew *Enterococcus faecalis*. However, BAL acid-fast bacilli (AFB) staining, CBNAAT, fungal cultures, and cytology were all negative. Antibiotic therapy was initiated based on the organism's sensitivity pattern, but there was no radiological improvement or symptomatic relief.

A repeat contrast-enhanced CT (CECT) scan revealed persistent patchy areas of heterogeneously enhancing consolidation in the apical and anterior segments of the right upper lobe and the superior segment of the right lower lobe. Parenchymal fibrosis and traction bronchiectasis were also noted in the left upper lobe. A PET scan showed no significant uptake.

Workup for connective tissue disorders and vasculitis revealed an elevated rheumatoid factor of 2386.4 IU/ml, high serum levels of anti-CCP antibodies (1372.77 U/ml), and a weakly positive p-ANCA. Considering the differential diagnoses—tuberculosis, malignancy, rheumatoid nodule, and ANCA-associated vasculitis—the patient underwent a CT-guided lung biopsy. Histopathological examination revealed predominantly necroinflammatory exudate, sparse viable lung parenchyma cores with dense lymphocytic infiltration, and occasional collections of epithelioid histiocytes. Stains for fungi, AFB, and CBNAAT were all negative.

PULMONARY RHEUMATOID NODULE: A RARE BUT SIGNIFICANT MANIFESTATION IN RHEUMATOID ARTHRITIS

The biopsy confirmed the diagnosis of a rheumatoid nodule with high certainty. The patient was started on mycophenolate mofetil 500 mg twice daily, hydroxychloroquine 200 mg at bedtime, and prednisone 5 mg once daily. After one month of treatment, the patient showed both clinical and radiological improvement.

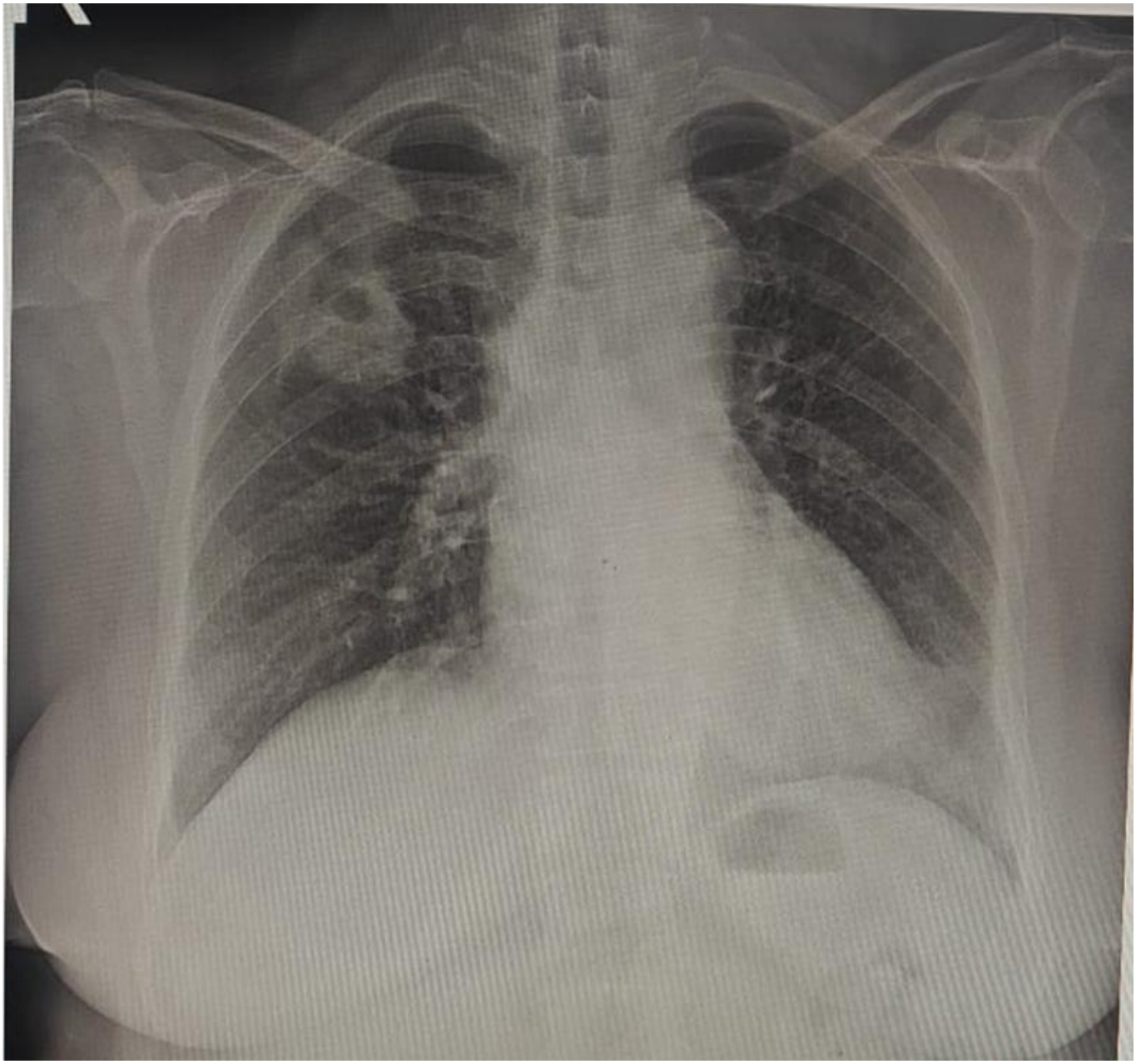
Rheumatoid arthritis (RA) is a systemic inflammatory disorder that primarily causes symmetric polyarthritis, with extra-articular involvement being common. The lungs are one of the most frequently affected organs in RA, and pulmonary manifestations contribute to approximately 10–20% of all deaths in RA patients. Pulmonary disease is observed in 60–80% of individuals with RA and is one of the most common extra-articular complications.

Rheumatoid nodules are typically asymptomatic and are found in up to 32% of RA patients. However, cavitation of RA nodules can lead to more severe symptoms and pose diagnostic challenges. Differential diagnoses for cavitary nodules include malignancy, tuberculosis, and fungal infections. Over time, cavitary rheumatoid nodules may enlarge and cause complications such as hemoptysis, pneumothorax, and colonization by infectious pathogens. Treatment is primarily aimed at managing the underlying rheumatoid arthritis.

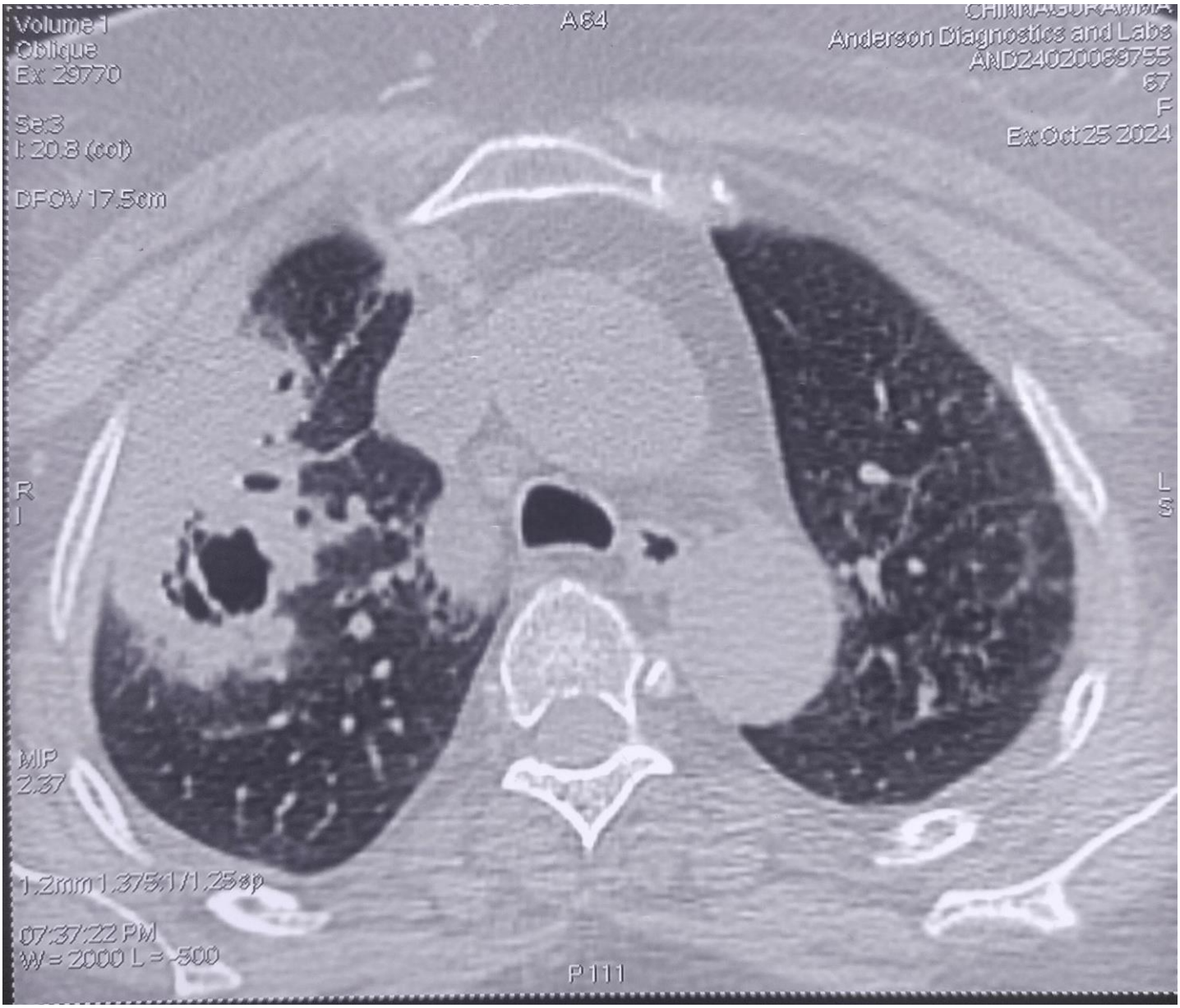
PULMONARY RHEUMATOID NODULE: A RARE BUT SIGNIFICANT MANIFESTATION IN RHEUMATOID ARTHRITIS

Histopathological diagnosis is crucial in cases like this, where the clinical and radiological findings may overlap with several other conditions, such as tuberculosis, malignancy, or infections. The differential diagnosis for cavitary lung lesions can be challenging, and while imaging studies and microbiological cultures provide valuable clues, they may not always yield definitive results. In this case, the CT-guided lung biopsy and histopathological examination were essential for confirming the diagnosis of a rheumatoid nodule. Without histopathological confirmation, misdiagnosis could have led to inappropriate treatment, potentially worsening the patient's condition. The biopsy provided critical insights into the necroinflammatory nature of the lesion, helping to exclude other possible etiologies and ensuring the correct management strategy, primarily aimed at treating the underlying rheumatoid arthritis.

Chest xray before treatment suggestive of cavitating non homogenous opacity.

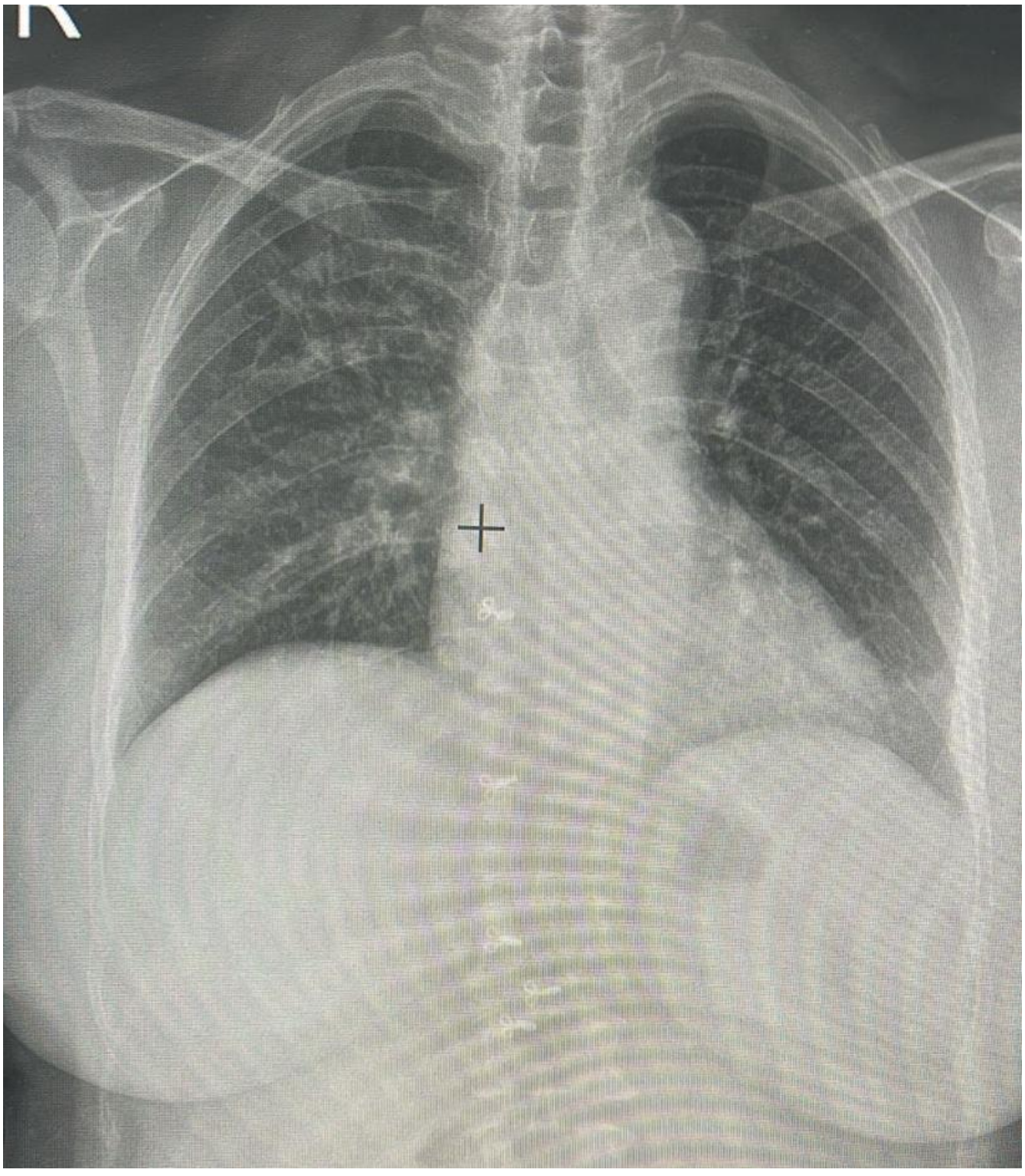


HRCT thorax before treatment suggestive of cavitating consolidation in the apical and anterior segments of the right upper lobe.



Chest xray post 1 month of treatment showing resolution

-



HISTOPATHOLOGICAL DIAGNOSIS IN SARCOIDOSIS: A KEY TO ACCURATE MANAGEMENT

DR NINU P BABU , DR SAKTHIMURUGAN

A 34-year-old male presented to our respiratory medicine outpatient department with persistent dry cough, redness, and increased watering in both eyes. Upon detailed evaluation, chest CT revealed multiple variable-sized enhancing soft tissue nodules (>5mm) in both lungs, along with enlarged, heterogeneously enhancing lymph nodes in the pretracheal, paratracheal, bilateral hilar, prevascular, aortopulmonary, and subcarinal regions. The largest of these measured 3.6 x 2.3 cm in the subcarinal region. ACE levels were elevated. Clinical examination and fundoscopy confirmed pan-uveitis. A PET-CT was also performed, which showed metabolically active, non-FDG avid bilateral pulmonary nodules, along with metabolically active bilateral hilar and mediastinal lymphadenopathy.

The patient reported a similar history of eye redness and increased watering two years prior. At that time, chest CT revealed bilateral symmetrical hilar and mediastinal lymphadenopathy, with the largest nodes measuring 21x12mm in the right hilar region and 18x12mm in the subcarinal region. Additionally, bilateral lung ground-glass opacities were noted. Serum ACE levels were within normal limits, and a comprehensive vasculitis workup was negative. Based on these findings and the clinical presentation, a presumptive diagnosis of sarcoidosis was made, and the patient was started on oral prednisolone for symptom management.

HISTOPATHOLOGICAL DIAGNOSIS IN SARCOIDOSIS: A KEY TO ACCURATE MANAGEMENT

The patient continued corticosteroid therapy for two years and initially showed clinical improvement. However, upon tapering the dose, he developed a recurrence of symptoms with clinico-radiological progression, raising concerns for corticosteroid-refractory sarcoidosis.

Given the progression of symptoms and imaging findings, the patient underwent Endobronchial Ultrasound (EBUS)-guided transbronchial needle aspiration (TBNA) of the subcarinal lymph node. Histopathological examination revealed non-caseating granulomatous inflammation with negative acid-fast staining, confirming the diagnosis of sarcoidosis.

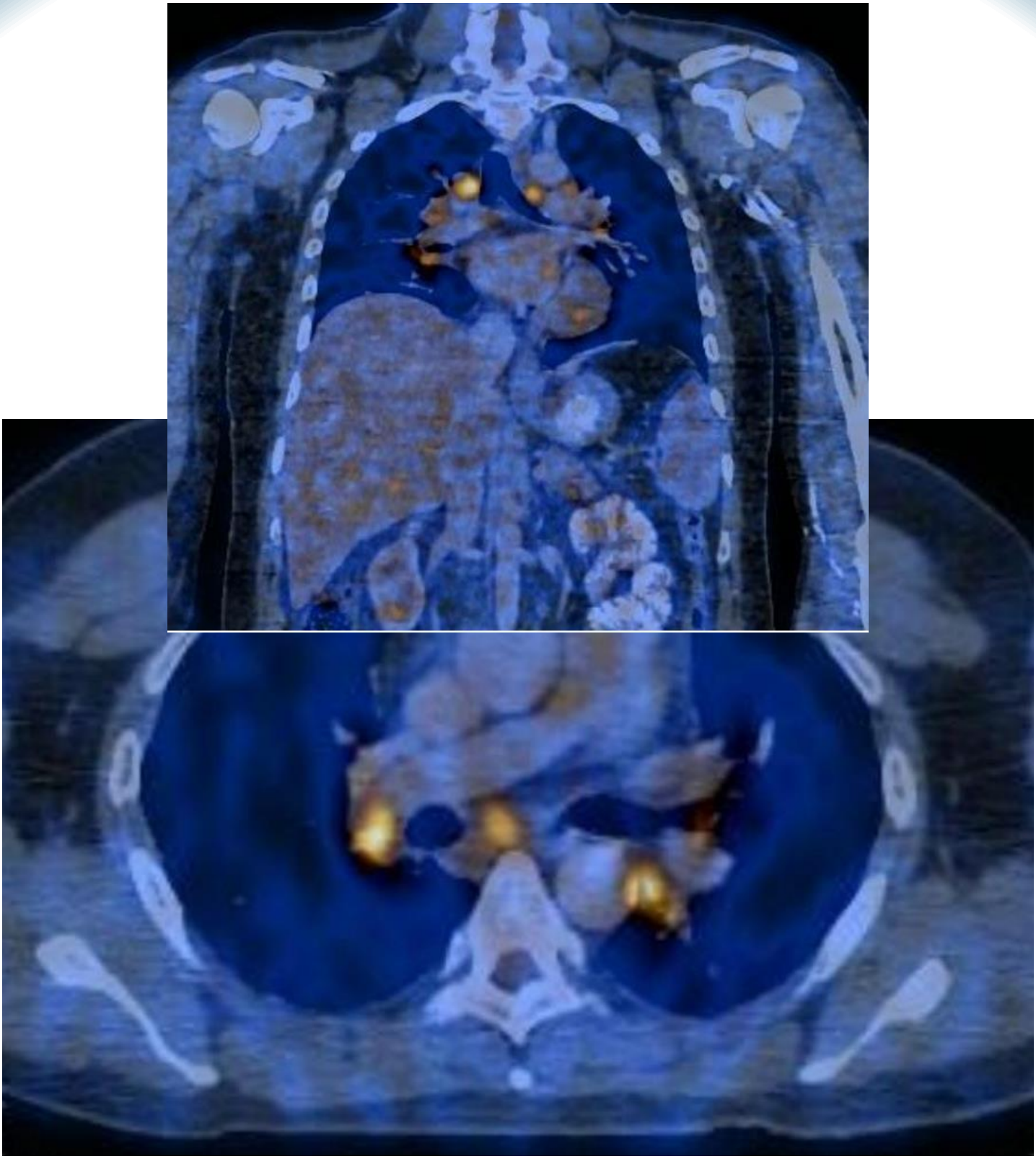
This case highlights the challenges of diagnosing sarcoidosis, particularly in its early stages, and underscores the importance of a thorough diagnostic workup. Sarcoidosis can mimic various conditions, including infections like tuberculosis, malignancies, and other autoimmune disorders. The clinical overlap between these conditions can be significant, and without histopathological confirmation, there is a risk of misdiagnosis. Additionally, the management strategies for these differential diagnoses are often contradictory.

HISTOPATHOLOGICAL DIAGNOSIS IN SARCOIDOSIS: A KEY TO ACCURATE MANAGEMENT

In this case, empirical treatment with corticosteroids was initiated based on the clinical suspicion of sarcoidosis, despite the absence of histopathological confirmation. This approach is often used when clinical and radiological features strongly suggest sarcoidosis, and other differential diagnoses have been excluded. However, histopathological confirmation is essential not only for accurate diagnosis but also for guiding the appropriate treatment strategy and avoiding potential harm from misdiagnosis.

The patient's response to prednisolone was suggestive of sarcoidosis, but the definitive diagnosis was only confirmed after EBUS TBNA. Elevated ACE levels, a known marker of sarcoidosis, further supported the diagnosis. Although ACE levels can be normal in some cases, they are often elevated in active disease and serve as a useful adjunct in diagnosis.

Once the diagnosis of sarcoidosis was confirmed, the patient was started on methotrexate and adalimumab. Methotrexate is commonly used in refractory cases of sarcoidosis or when corticosteroid-sparing therapy is needed. Adalimumab, a TNF-alpha inhibitor, is increasingly used in managing severe or refractory sarcoidosis. Following treatment, the patient showed significant clinical improvement.



PET CT showing metabolically active bilateral hilar and mediastinal lymph nodes

LUNG NEUROENDOCRINE TUMOR MIMICKING PNEUMOTHORAX AND ASTHMA IN A YOUNG FEMALE: A CASE REPORT

DR NINU P BABU, DR SREENATH A M

A 32-year-old female presented to our outpatient department (OPD) with right-sided chest pain and sudden onset of breathlessness, accompanied by orthopnea over the past 3 days. The patient reported a history of exertional breathlessness for the past year, for which she had been treated with inhaled bronchodilators prescribed by a private doctor. Upon evaluation, breath sounds were absent on the right side of the thorax, and a chest X-ray revealed a massive right-sided pneumothorax with collapse of the right lung. A plain CT chest confirmed the right pneumothorax with passive atelectasis of the underlying lung. The patient was promptly admitted to the medical ICU, and an intercostal drainage tube (ICD) was inserted. Following the ICD insertion, the collapsed lung re-expanded, and the ICD was removed after a successful clamp trial.

The patient had a history of childhood pulmonary tuberculosis but no other significant medical history. After lung expansion, a repeat CT thorax was done to investigate the cause of the spontaneous pneumothorax. Imaging revealed ill-defined patchy areas of ground-glass opacities with centrilobular nodules in the right upper and middle lobes, suggesting an infective etiology. Additionally, multiple pleuro-parenchymal fibro-atelectatic bands in the right and left lower lobes were observed, indicating sequelae from a previous infection.

Further investigation with fiberoptic bronchoscopy showed a small nodule in the apical segment of the right upper lobe and in the left lower lobe beneath the secondary carina. Bronchial washing and biopsy were obtained. Bronchial washing culture and GeneXpert were negative. The histopathological examination (HPE) of the biopsy specimen was suggestive of neuroendocrine tumor (NET). Immunohistochemistry (IHC) was performed, which showed negative results for synaptophysin and chromogranin, with a K167 index of 1%. A consultation with medical oncologist recommended a DOTANOC PET-CT and MRI of the chest. The report showed no significant pulmonary nodule or enhancing lesions, though centrally located small bronchial lesions may not be visualized on PET-CT. The patient was referred to a surgical oncologist for tumor resection.

Discussion:

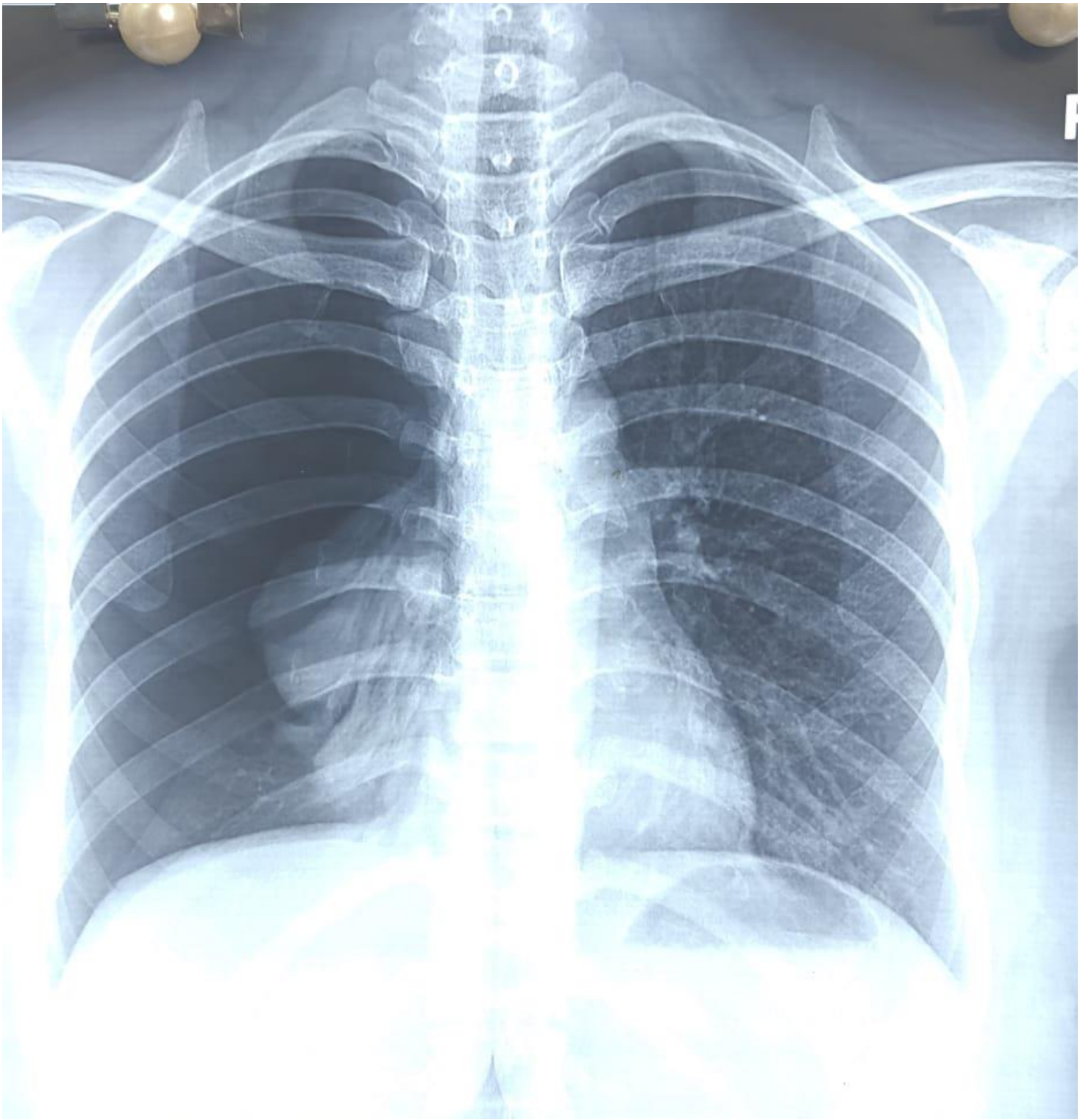
Neuroendocrine tumors (NETs) are a diverse group of malignancies originating from neuroendocrine cells, with the lung being the second most common site after the gastrointestinal tract. While these tumors can occur throughout the body, they are most frequently located in the thorax, particularly in the tracheobronchial tree and thymus. NETs are often asymptomatic, and many lung NETs are diagnosed incidentally or present with nonspecific symptoms that resemble common respiratory conditions, such as asthma or chronic obstructive pulmonary disease (COPD). Pneumothorax as a presenting symptom is rare.

Most well-differentiated lung NETs are centrally located in the main bronchi (10%) or lobar bronchi (75%), with the remainder found in the peripheral lung. Over 40% of lung NET cases are detected incidentally during routine chest radiography. Thoracic CT with contrast is the gold standard for imaging, while single-photon emission CT (SPECT) using the 99mTc-Tektrotyd tracer offers enhanced sensitivity for detecting somatostatin receptors.

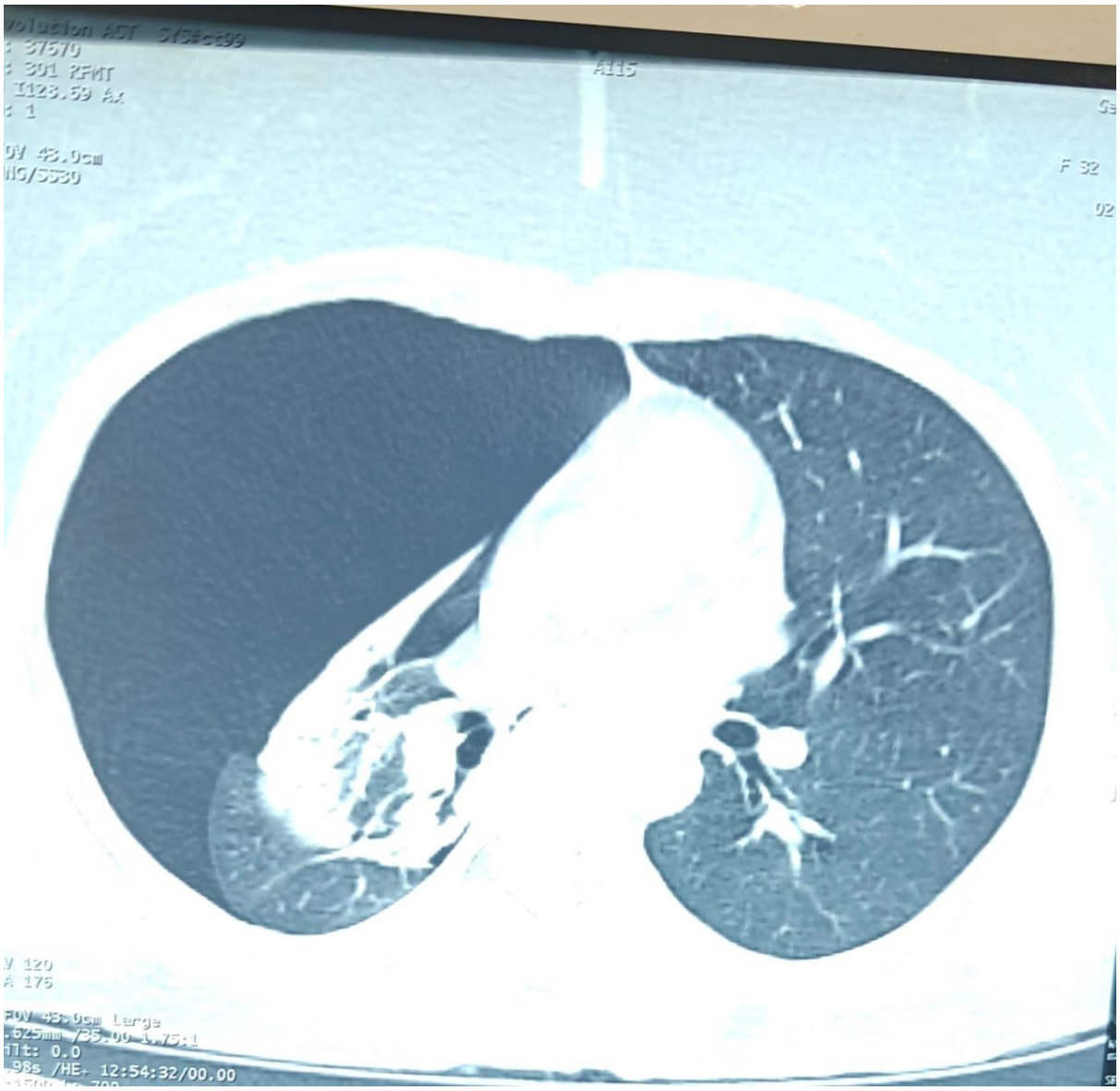
Bronchoscopy is a key diagnostic tool for identifying NETs, especially those presenting with bronchial symptoms. It is a safe and widely used procedure for obtaining histopathological diagnoses. Surgical resection remains the treatment of choice for localized NETs, with 5- and 10-year survival rates exceeding 90% after resection.

This case underscores the importance of a comprehensive investigation when evaluating the cause of pneumothorax, particularly in young patients. It also highlights the need to consider malignancy in such cases. Not all cases of exertional breathlessness should be attributed to obstructive airway diseases. In this case, the patient had been diagnosed with bronchial asthma and treated with inhaled bronchodilators for a year, even though NETs can present with symptoms similar to asthma. Therefore, it is essential to utilize all available diagnostic resources and adopt a thorough approach to ensure early diagnosis and the best possible outcomes for the patient.

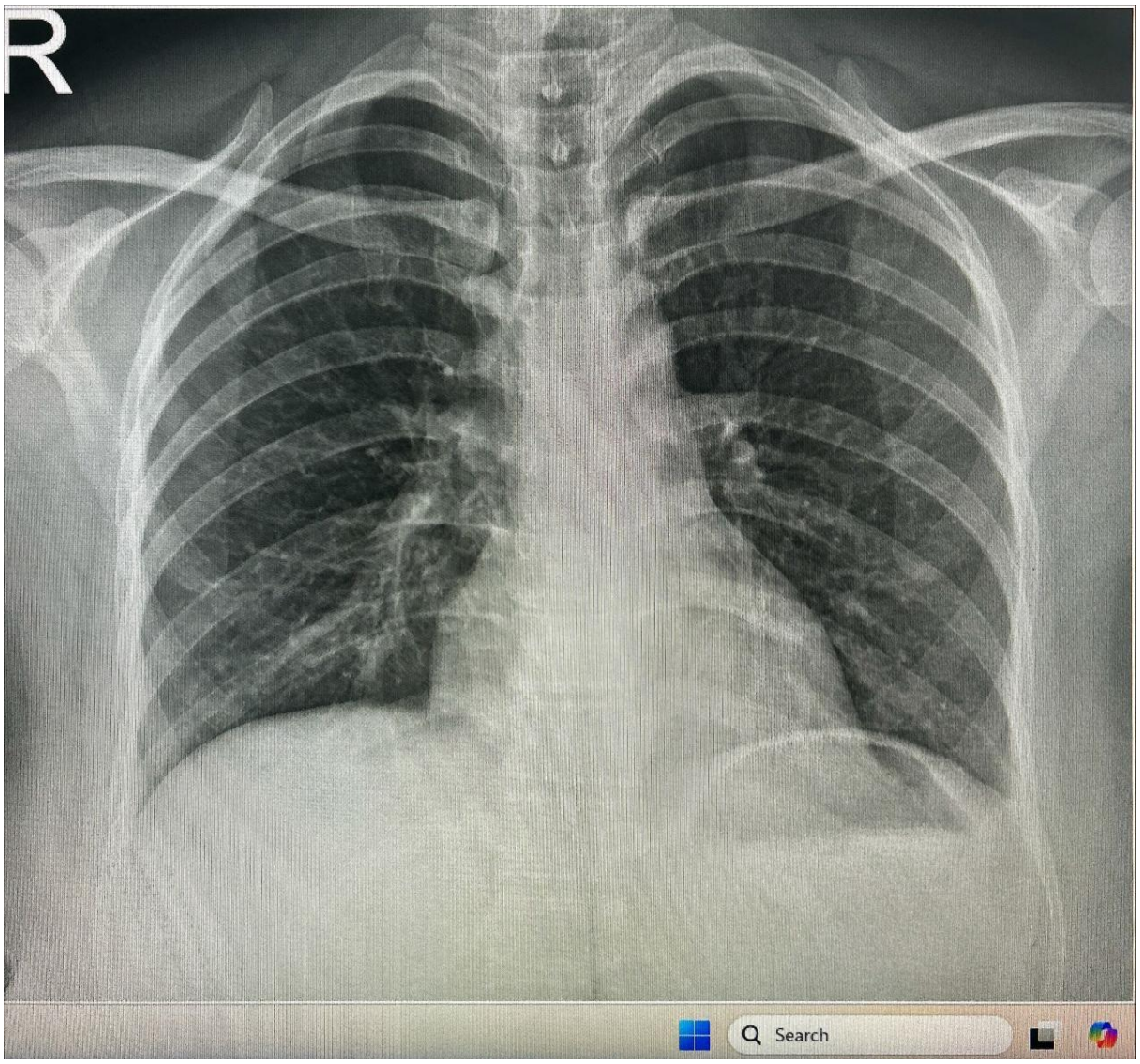
Chest xray suggestive of right pneumothorax



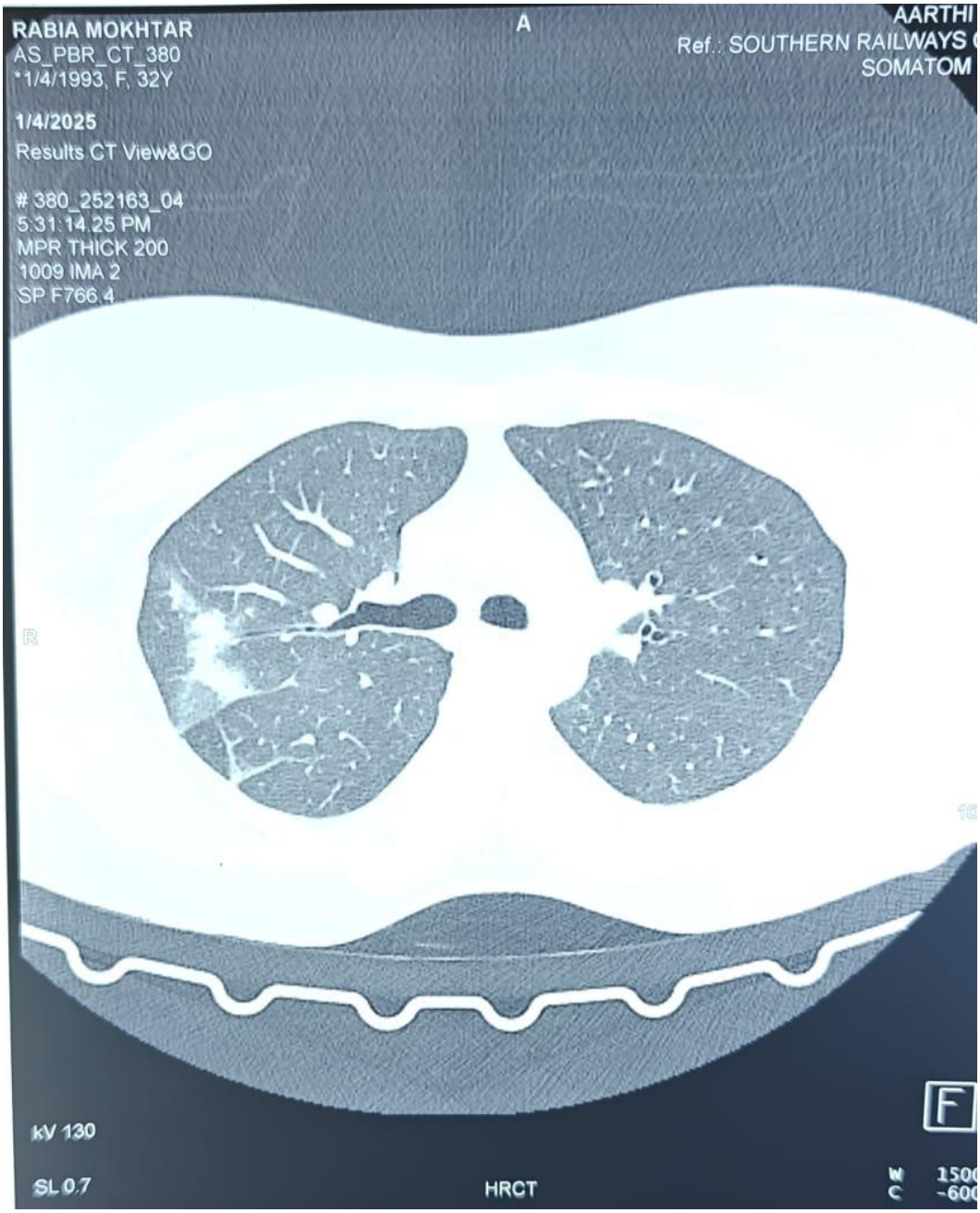
Chest CT suggestive of right pneumothorax with passive atelectasis of right lung



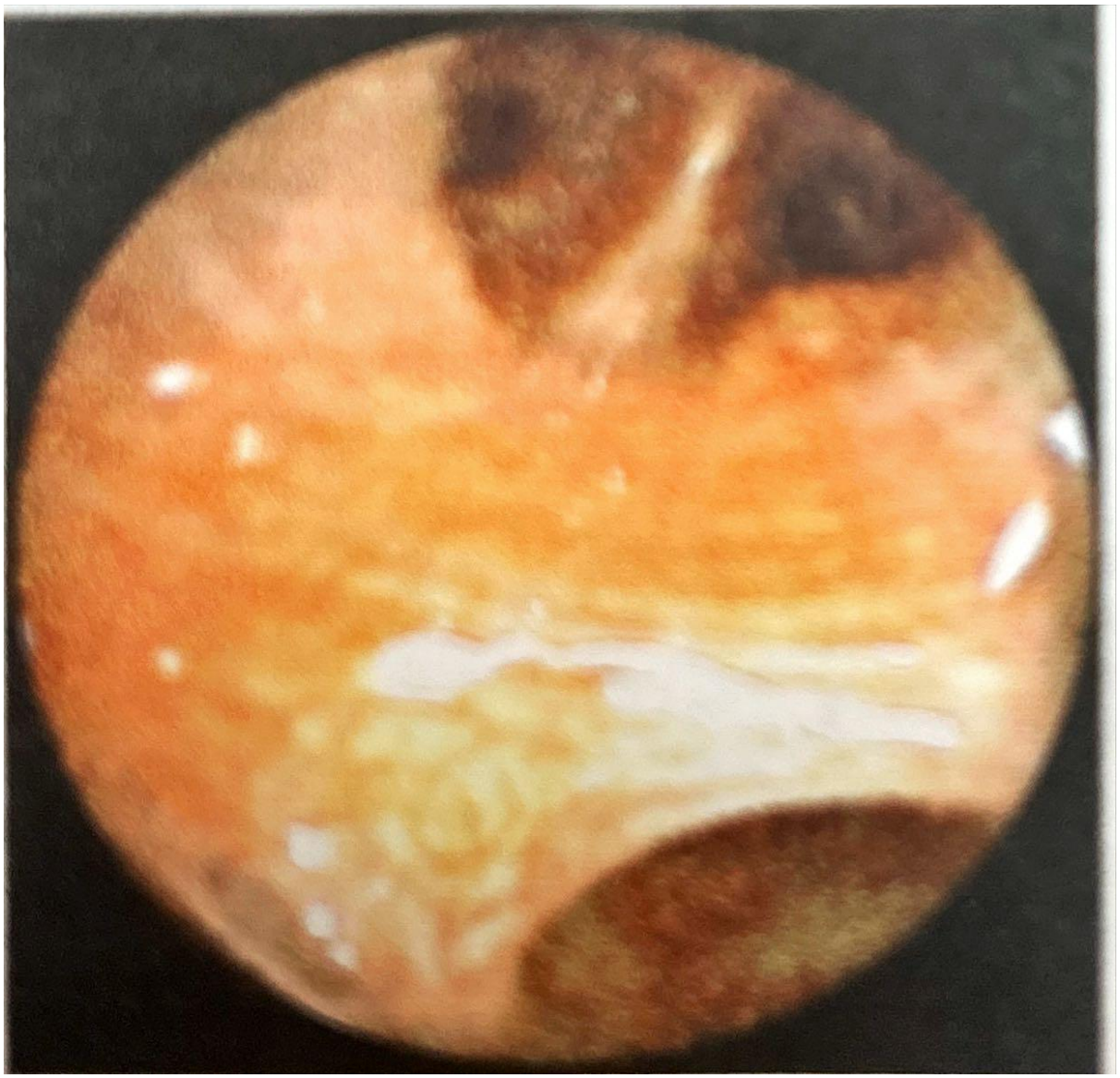
Post ICD removal chest Xray suggestive of expanded right lung



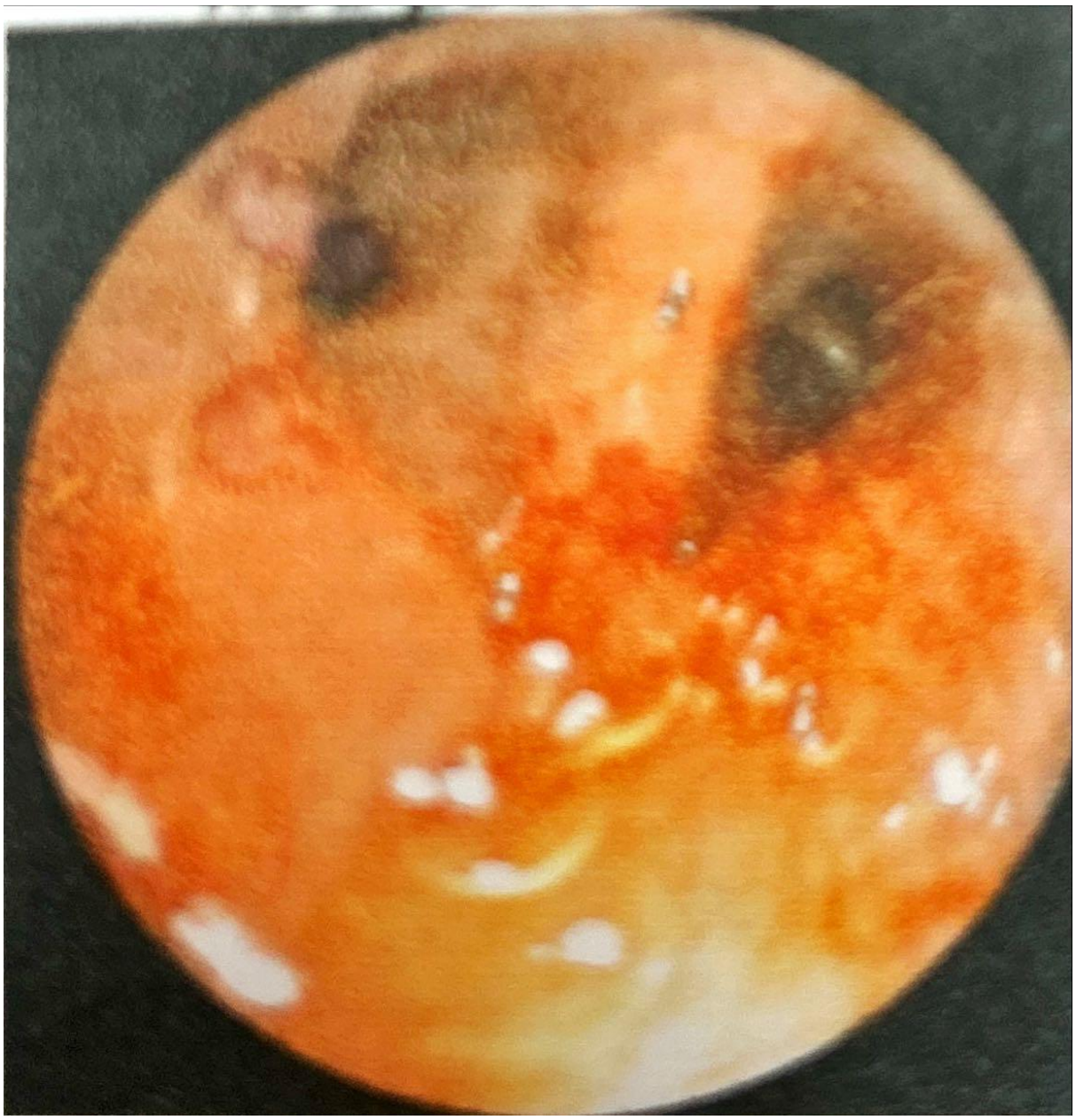
CT chest post ICD insertion suggestive of right lung expansion



Bronchoscopic image of right upper lobe nodule



Bronchoscopic image post nodule biopsy



DEPARTMENT OF ORTHOPEDICS

AGGRESSIVE BONE TUMOR – A CASE REPORT WITH 2 YEARS FOLLOW-UP AND MANAGEMENT

Abstract:

Osteosarcoma is the most common primary malignant bone tumor, primarily affecting adolescents and young adults. This article presents a case of an aggressive bone tumor diagnosed through incisional biopsy, performed on October 13, 2022. The histopathological examination (HPE) confirmed a malignant primary bone neoplasm, with high suspicion of osteosarcoma. This report discusses the diagnostic approach, histopathological findings, short-term follow-up, and management strategies.

Introduction

Osteosarcoma is a highly aggressive bone tumor characterized by malignant osteoid production. Early diagnosis and accurate histopathological assessment are crucial for treatment planning. Incisional biopsy is a common diagnostic technique used to confirm malignancy in suspicious bone lesions. This article highlights a case in which incisional biopsy was used to diagnose osteosarcoma and discusses its role in guiding treatment and early management.

Case Presentation

A 20-year-old college student presented with persistent pain over the right thigh since February 2022, with no relief. The patient was referred to our hospital in October 2022 for further evaluation. Imaging studies, including X-ray and MRI revealed an aggressive bone lesion.

An incisional biopsy was performed on October 13, 2022, to obtain a definitive histopathological diagnosis.

AGGRESSIVE BONE TUMOR – A CASE REPORT WITH 2 YEARS FOLLOW-UP AND MANAGEMENT

On Examination:

Inspection: No abnormalities seen.

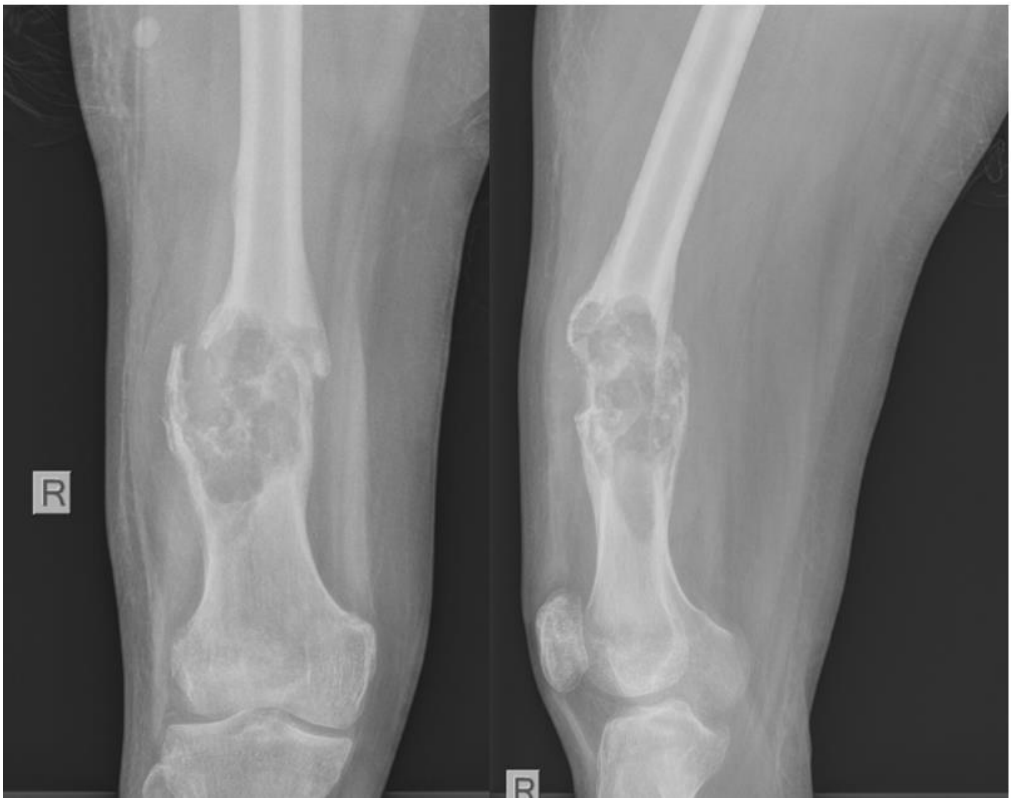
Palpation: An irregular circumferential mass was palpated over the distal 1/3rd of the femur with irregular margins. Painless near complete range of movements of hip and knee. Nil deficits noted.

MRI Findings:

MRI performed at our hospital showed the following features:

Right femur distal 1/3rd lytic destructive lesion measuring approximately 8.3 x 4.7 x 3.9 cm. Cortex expanded and scalloped inwards. T2 intermediate signal periosteal soft tissue noted along the anterior aspect. Edema noted in vastus medialis (VM), vastus lateralis (VL), vastus intermedius (VI), and rectus femoris muscles.

Malignant primary bone neoplasm with differential diagnosis of Ewing's sarcoma vs. osteosarcoma.

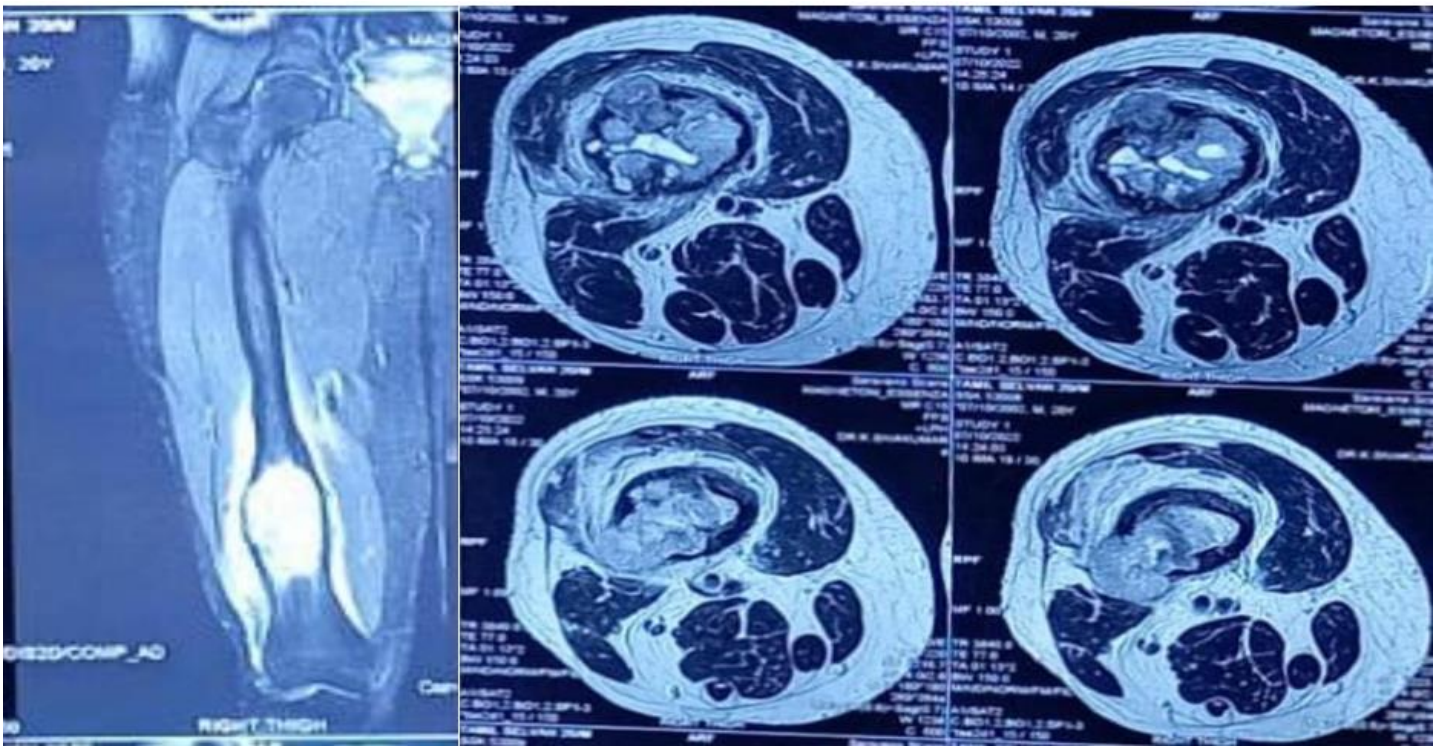


AGGRESSIVE BONE TUMOR – A CASE REPORT WITH 2 YEARS FOLLOW-UP AND MANAGEMENT

Additional Imaging and Diagnostic Workup:

CT Chest: No evidence of pulmonary nodules.

PET-CT: No definite evidence of increased MDP uptake or osteoblastic lesion elsewhere in the body, suggesting no distal metastasis.



AGGRESSIVE BONE TUMOR – A CASE REPORT WITH 2 YEARS FOLLOW-UP AND MANAGEMENT

Histopathological Examination Findings

The biopsy specimen revealed a malignant primary bone neoplasm, with histological features strongly suggestive of osteosarcoma. Key microscopic findings included:

Presence of pleomorphic spindle cells. Abnormal osteoid matrix production. High mitotic activity. Areas of necrosis and hemorrhage

Immunohistochemical staining confirmed the osteoblastic lineage of the tumor cells, supporting the diagnosis of osteosarcoma.

Management and Short-Term Follow-Up:

Following diagnosis, the patient was initiated on neoadjuvant chemotherapy as part of a multimodal treatment approach. The initial response was monitored using follow-up imaging and clinical assessments. Surgery was planned for definitive tumor resection. Early post-treatment evaluation showed [mention initial response, e.g., partial regression, stable disease, or progression].

Neoadjuvant Chemotherapy:

The patient underwent four preoperative chemotherapy cycles, administered once every three weeks:

- **Doxorubicin:** 120 mg – Day 1, 2, 3
- **Cisplatin:** 90 mg – Day 1, 2, 3
- Followed by **Injection CSG-f** for seven days

AGGRESSIVE BONE TUMOR – A CASE REPORT WITH 2 YEARS FOLLOW-UP AND MANAGEMENT

MRI Findings After Two Cycles of Chemotherapy:

Hetero-intense mass in the distal femur measuring 11.2 x 6.4 x 5 cm. Cortical break associated with a soft tissue component.

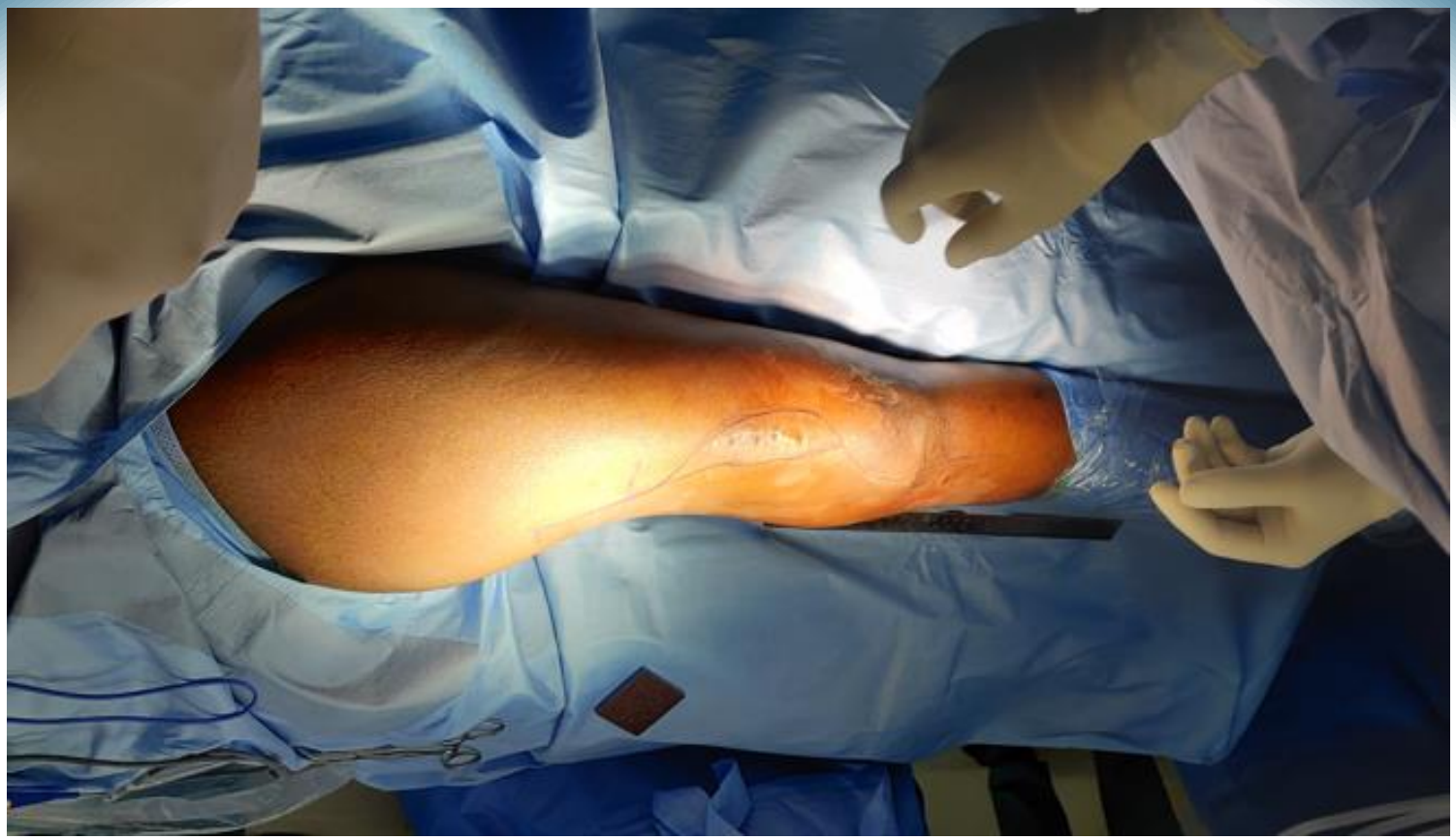
Adjacent periosteal reaction noted. No neurovascular involvement. No skip lesion detected.

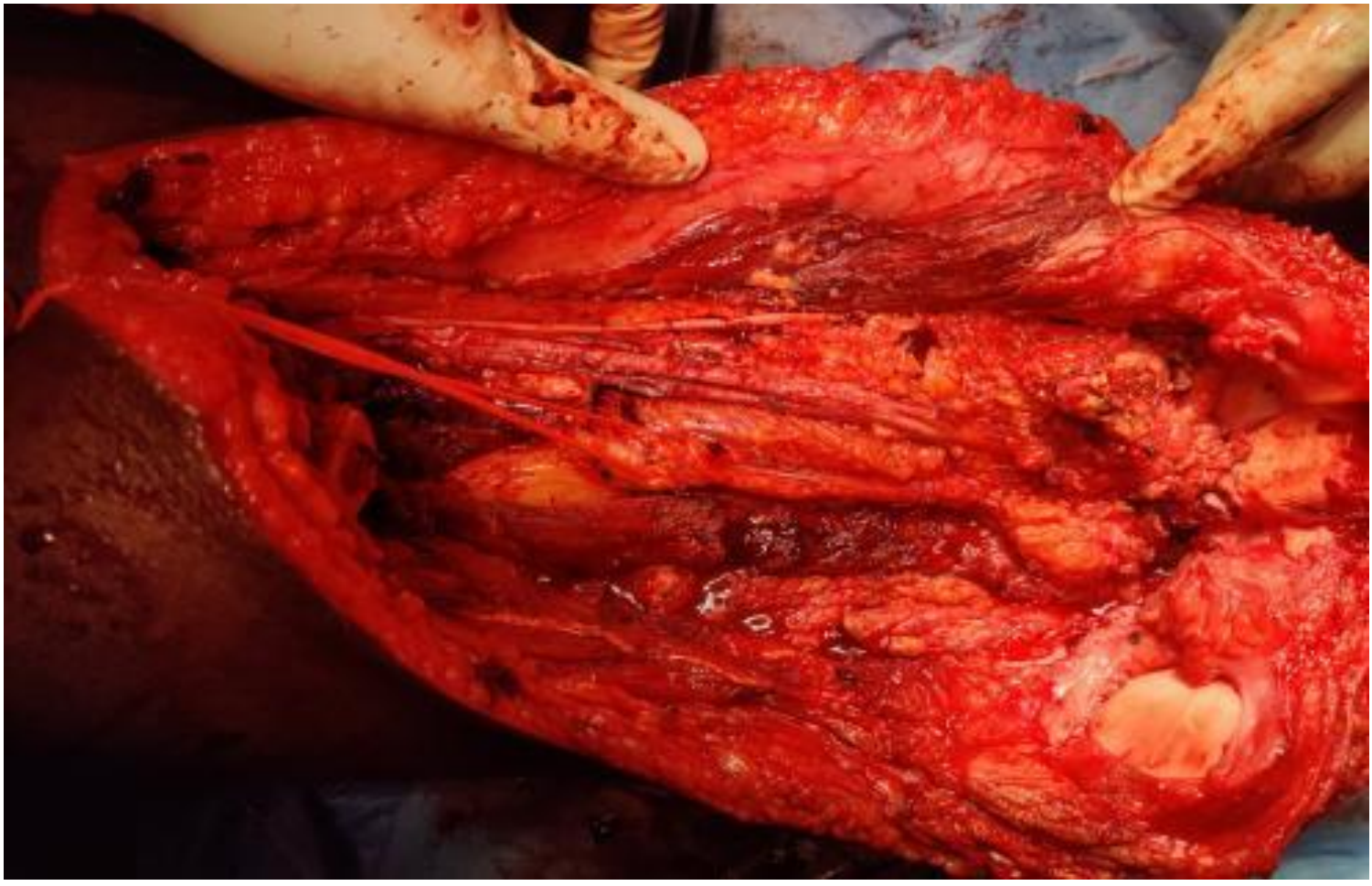
Tumor Measurements:

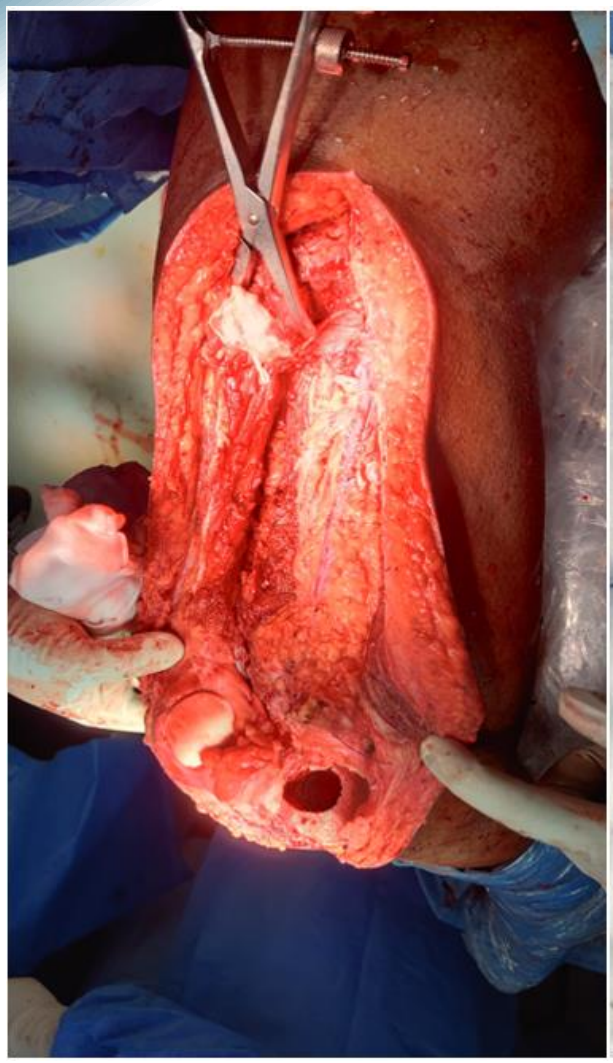
- Articular surface to distal margin: 68.4 mm
- Articular surface to proximal margin: 170 mm
- Lesion length: 104.6 mm
- Tip of greater trochanter to proximal margin: 267 mm
- Canal diameter at isthmus: 14 mm

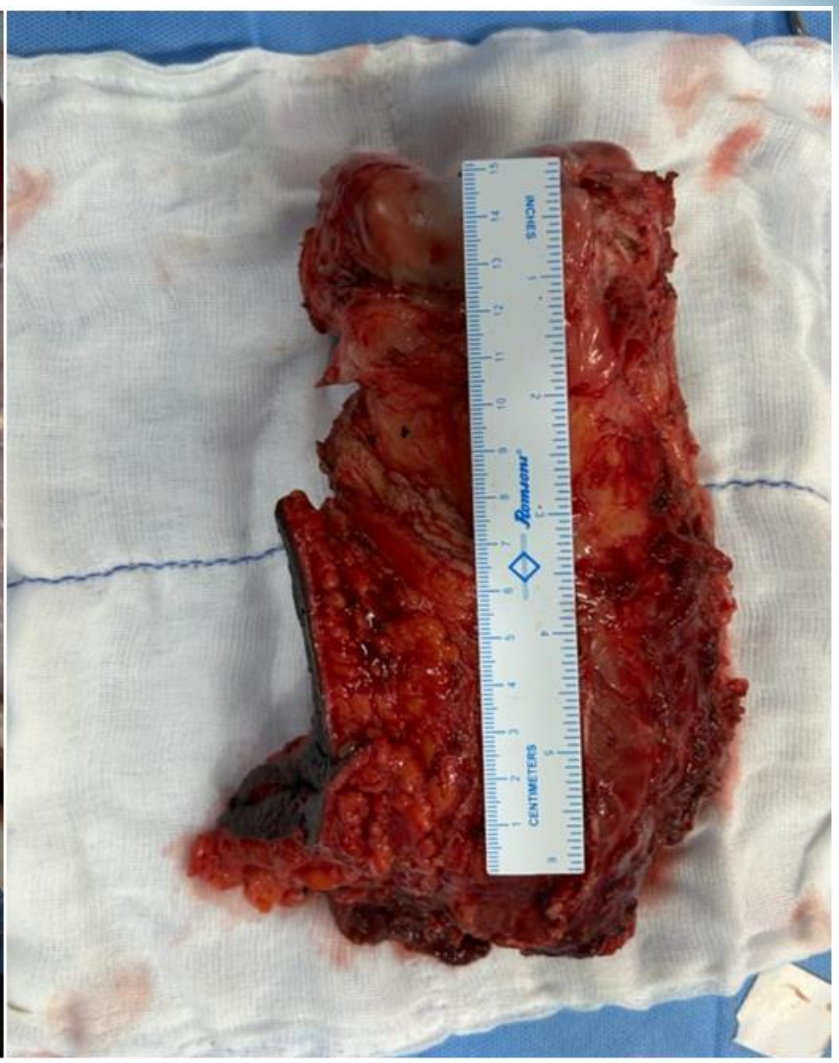
Surgical Plan and Procedure:

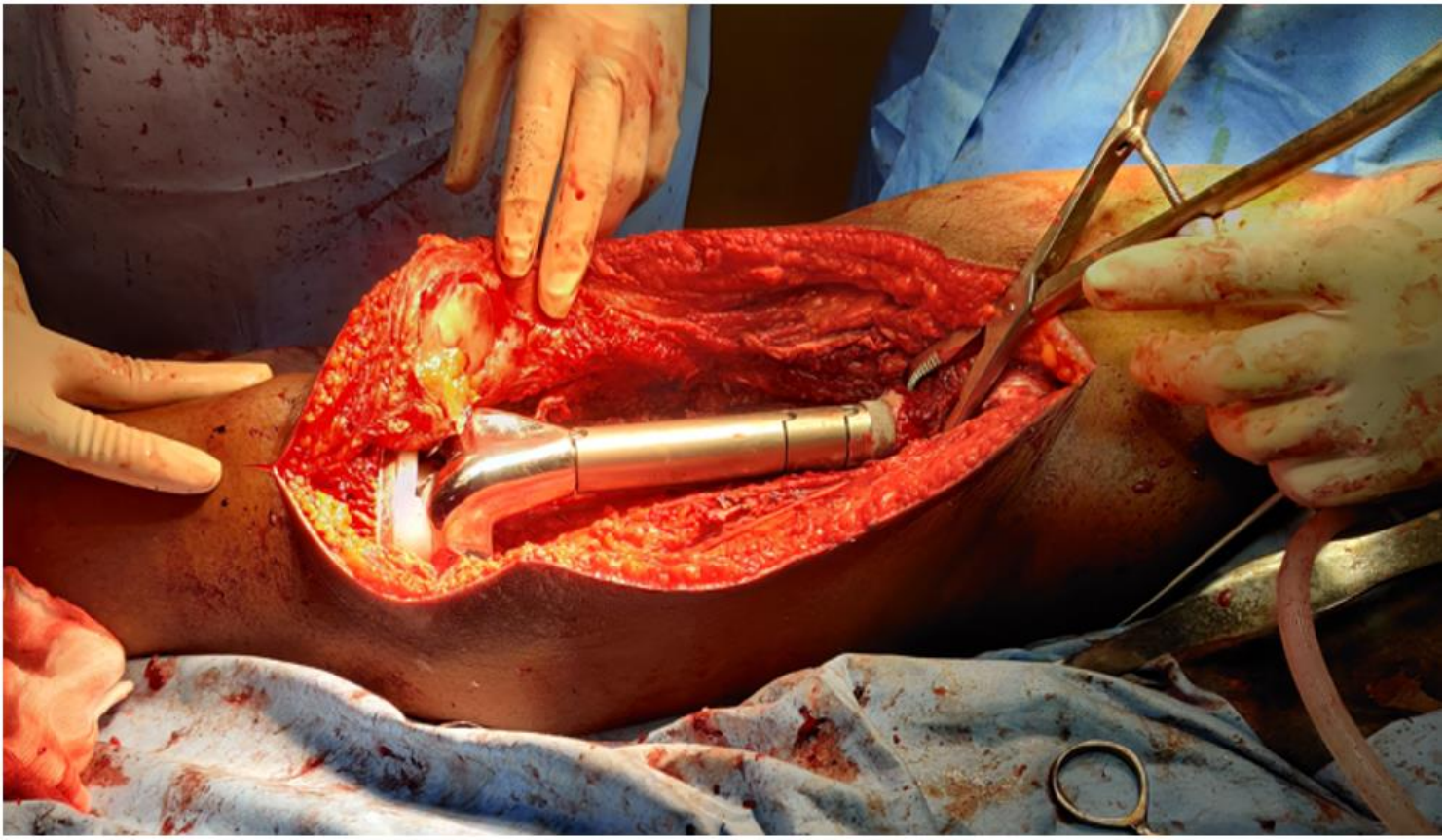
Limb salvage surgery was planned as the definitive surgical approach for tumor resection, aiming to preserve limb function while ensuring complete oncological clearance.








INCHES
CENTIMETERS



AGGRESSIVE BONE TUMOR – A CASE REPORT WITH 2 YEARS FOLLOW-UP AND MANAGEMENT

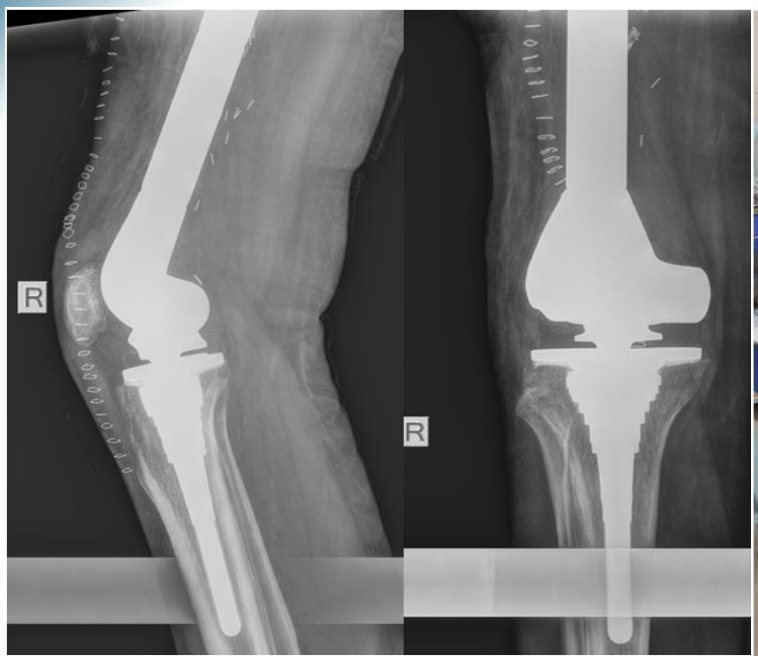
On **January 19, 2023**, a **wide local excision with limb salvage surgery** was successfully performed. Tumor dissection was carried out meticulously to ensure adequate oncological margins while preserving critical neurovascular structures. **Reconstruction was done using custom mega prosthesis with knee joint replacement with soft tissue reconstruction.** The incision included the previous biopsy scar to prevent tumor seeding and ensure complete oncological clearance.

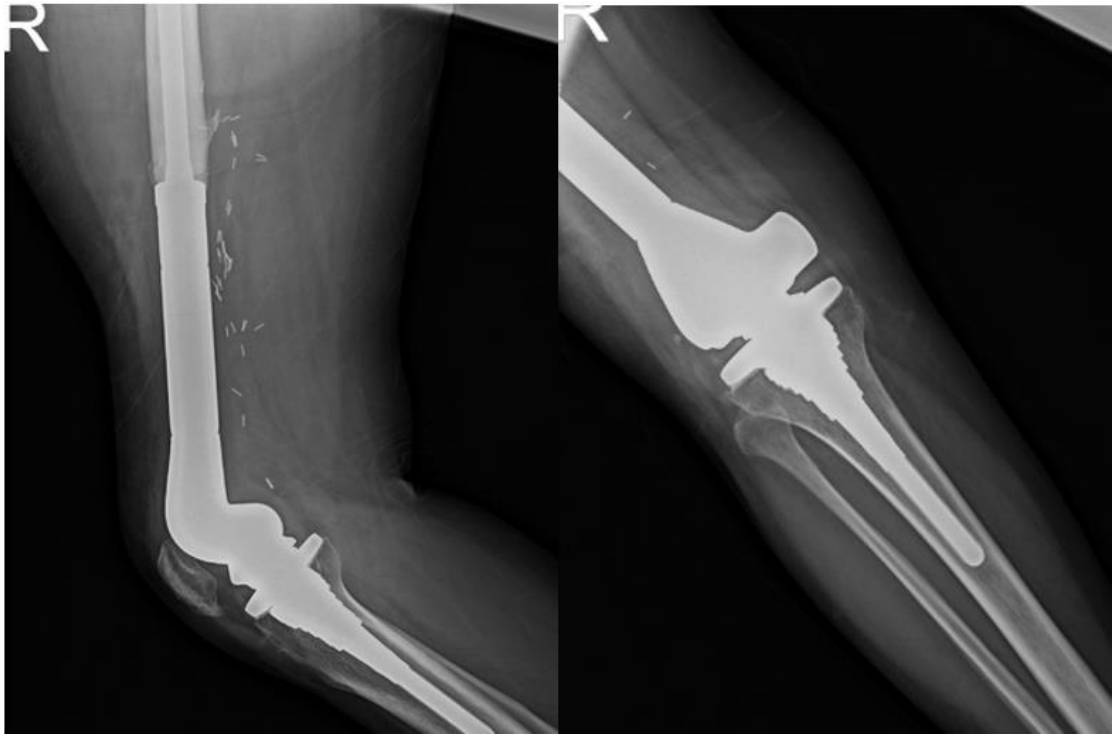
Histopathological Examination of Resected Tumor:

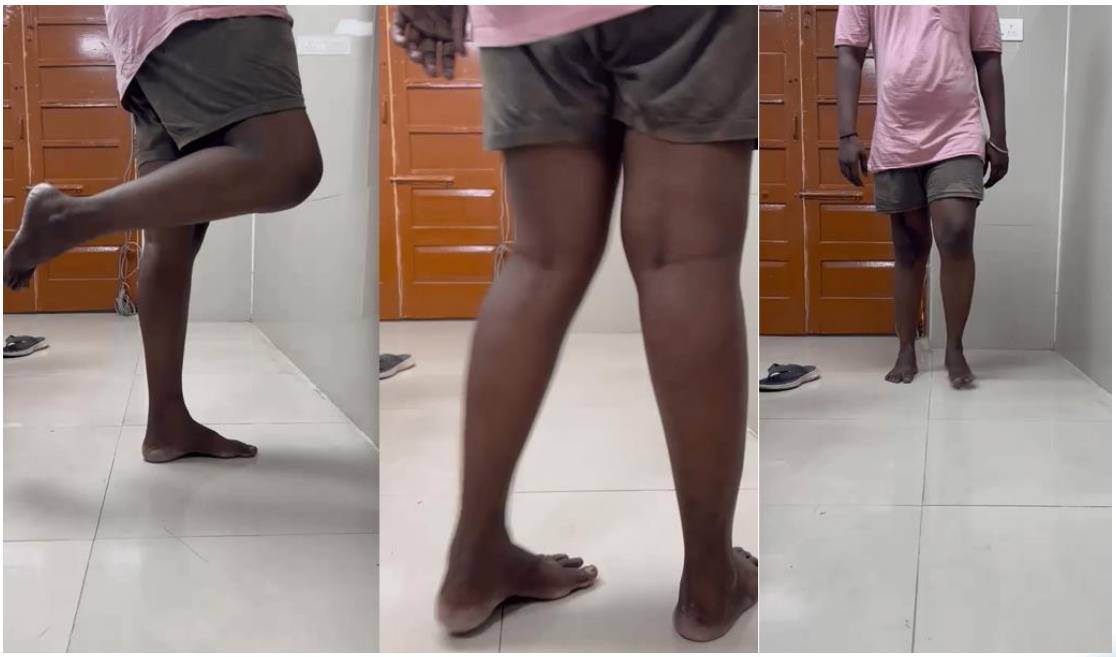
- Grade 3 osteosarcoma
- Margins free of tumor
- No perineural invasion
- 10% necrotic tumor
- No lympho vascular emboli
- 15-17 mitotic counts per 10 high-power fields (HPF)

Postoperative Protocol:

Adequate analgesia. Anticoagulant therapy with Inj. Clexane 0.6 ml SC OD. Full weight-bearing with walker support. Knee and ankle range of motion (ROM) as tolerated.Static quadriceps and hamstring exercises


R
R


R
R



Postoperative Chemotherapy:

The patient underwent three postoperative chemotherapy cycles, administered once every three weeks:

- **Epirubicin:** 150 mg – Day 1
- **Cisplatin:** 90 mg – Day 1, 2
- **Ifosfamide:** 3.2 g with **MESNA** 3.2 g – Day 1, 2, 3
- **Injection Filgrastim** 300 mcg SC x 7 days

Follow-Up:

Two weeks post-third chemotherapy cycle, a **CT chest** was performed, showing no evidence of pulmonary metastases.1 year and 2 years CT Chest shows no evidence of metastasis.

Discussion:

Osteosarcoma is a malignant tumor originating from mesenchymal tissues, with a high potential for local invasion and distant metastasis. Advances in chemotherapy and surgical techniques have significantly improved survival rates, transforming osteosarcoma from an almost universally fatal disease into a condition where most patients can achieve long-term remission. Early diagnosis plays a pivotal role in improving prognosis, as prompt initiation of treatment enhances the chances of limb preservation and overall survival. A multidisciplinary approach involving oncologists, orthopedic surgeons, and radiologists is crucial for optimizing patient outcomes. Limb salvage surgery is a surgical procedure aimed at restoring bone and joint function after extensive resection of malignant bone tumors. Accurate and effective diagnosis, preoperative chemotherapy, surgical resection, postoperative chemotherapy, and lifelong monitoring are critical factors involved in the successful management of this complex and potentially fatal disease.

References:

- Messerschmitt PJ, Garcia RM, Abdulkarim FW, Greenfield EM, Getty PJ. Osteosarcoma. J Am Acad Orthop Surg. 2009;17:515.
- Sampo M, Koivikko M, Taskinen M, et al. Incidence, epidemiology and treatment results of osteosarcoma in Finland. Acta Oncol. 2011;50:1206–14.
- Arndt CAS, Rose PS, Folpe AL, Laack NN. Common musculoskeletal tumors of childhood and adolescence. N Engl J Med. 2012;87:475–87.
- Jo VY, Fletcher CDM. WHO classification of soft tissue tumours. Pathology. 2014;46:95–104.
- Luetke A, Meyers PA, Lewis I, Juergens H. Osteosarcoma treatment. Cancer Treat Rev. 2014;40:523–32.

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

PREGNANCY WITH SEVERE HYPERTROPHIC OBSTRUCTIVE CARDIOMYOPATHY
FIGHTING AGAINST ALL ODDS: A CASE REPORT

DHANDAPANI KS, ANUSHRI M, HAJIRA FATHIMA

INTRODUCTION

Hypertrophic cardiomyopathy (HCM) is a genetic disorder that has an autosomal dominant mode of transmission characterized by primary left ventricular hypertrophy that is not related to abnormal loading conditions (such as hypertension, valvular heart disease). This disease often caused by mutations within genes encoding cardiac sarcometric proteins. The prevalence of HCM in the general population is 1 in 500; therefore, a similar incidence in pregnant women is probable.

HCM is usually well tolerated in pregnancy. Most patients fall in the class II group of the modified world health organization (WHO) maternal cardiovascular risk scheme. However, a subgroup of women with HCM may be at higher risk of adverse pregnancy outcomes. Women with severe LVOT obstruction (LVOTO), symptomatic arrhythmias, and moderate systolic left ventricular dysfunction are in the higher-risk class III group of the modified WHO scheme-like in our case. In addition, the small minority of pregnant women with severe systolic left ventricular dysfunction or severe symptomatic LVOTO have a very high pregnancy risk. These women would be placed in the modified WHO class IV group in whom pregnancy is contraindicated.[1]

The reported total mortality in women with HOCM is 0.5% but worsening of symptoms such arrhythmias, heart failure, sudden cardiac death, thromboembolic events occurred in 29% of the patients.[2] Hence the MACE (Major adverse cardiovascular events) diagnosis, prevention and management is the main aspect in HOCM.

CASE REPORT

A 33-year-old G4P2L1A1 high risk HOCM patient, who was lost to follow up for the preceding 3 years presented at 20 weeks gestation with worsened dyspnoea (NYHA class III), palpitations and multiple episodes of near- syncope over the past 1 month. She had a history of sudden cardiac death of her brother and mother at the age of 20 years and 30 years respectfully. Her first pregnancy was well tolerated, which was LSCS done at Madya Pradesh, delivery details not known (patient was not diagnosed HOCM). During second pregnancy patient referred from her home town with symptoms of breathlessness to our hospital (apex cardiac centre in Indian railways). Emergency LSCS done after consulting cardiologist at 28 weeks of gestation in view of severe pulmonary oedema not responding to medical management (patient was diagnosed HOCM with severe LVOT obstruction). Baby died postnatally after 18 days. Patient recovered after 10 days of intensive cardiac care. Patient was sent home with optimised dose of beta blocker and advised genetic counselling, contraception, biannual review to cardiac OPD. Patient underwent one medical termination of pregnancy using over the counter MTP kit after one year of last LSCS. Did not turn up for cardiac or OBG review.

After 2 years she came to our hospital at 20 weeks of gestation with history of dyspnoea (NYHA class III) with minimal daily activities, palpitations and multiple episodes of near syncope for one month. Multidisciplinary approach initiated. Patient was admitted in cardiac intensive care under continuous monitoring. Echo showed a high resting LVOT gradient of 60 mm Hg, moderate to severe MR and dilated LA. Patient developed atrial fibrillation which was managed with verapamil and dose optimised based on heart rate monitoring.

Despite these indicators of adverse prognosis, she was managed successfully with anti-failure measures and antiarrhythmics, under combined cardio-obstetric care. Patient chose to remain as an inpatient, even after attaining NYHA II functional status. Stage I FGR was diagnosed and a course of antenatal corticosteroids was given at 33 weeks. Elective LSCS planned at 35 weeks 6 days in view of decreased fetal movements. Cardiologist, obstetrician, anaesthetist, paediatrics team were prepared. Though vaginal delivery with regional analgesia is appropriate in HOCM, our patient was delivered by LSCS due to a history of previous 2 LSCS deliveries, including one preterm LSCS. Intraoperative complications encountered were atonic PPH, managed with B lynch sutures and pulmonary oedema, managed with judicious diuretics and CPAP. Delivered an alive female baby of 1.9 kg with APGAR score 7/10, 8/10.

Patient shifted to cardiac ICU after surgery with CPAP. Patient was kept in mechanical ventilator, vitals were normalised. Patient weaned off from ventilator on POD-1. Contraception, cardiac follow up, neonatal follow up, contraception and genetic counselling advised to patient.

Discussion:

HOCM is increasingly diagnosed in women of childbearing age due to more widespread use of echocardiography and familial screening programs. The majority of young women with heart disease, including HOCM, wish to consider pregnancy and therefore obstetric admission is a common cause for hospitalisation in this patient population. However, to date pregnancy outcome data for these patients are scarce.[3]

HCM is an archetypical single gene disorder with an autosomal dominant pattern of inheritance. Autosomal recessive and X-linked modes of inheritance have been described but are rare.[4] The clinical course can range from a lifelong asymptomatic status to one where individuals are highly symptomatic and functionally limited with heart failure and malignant arrhythmias.

Diastolic left ventricular dysfunction is invariably present and some patients also develop systolic dysfunction later in the disease course. The LVOT obstruction is often associated with mitral regurgitation, mostly due to systolic anterior motion of the mitral valve, although intrinsic abnormalities of the mitral valve apparatus also contribute. Dyspnoea and chest pain are the most frequent symptoms and relate to the pathophysiological impact of the diastolic dysfunction, LVOT obstruction, mitral regurgitation, and myocardial ischaemia. Atrial fibrillation is the most common arrhythmia with an associated high risk of thromboembolism. There is an increased risk of sudden death, particularly in those with a family history of sudden death, symptoms of syncope, ventricular tachycardia, blunted blood pressure response on exercise and severe hypertrophy. In these patients, an implantable cardiovert can be used.

Pathophysiology in pregnancy

During pregnancy, plasma volume and cardiac output increase. The increase in cardiac output in the first and second trimesters is achieved by a larger stroke volume, while later in pregnancy there is an increase in heart rate. The additional volume load of pregnancy causes enlargement of the ventricular cavity, which theoretically might reduce the LVOT obstruction; however, the increased cardiac output tends to counteract this effect and the LVOT gradient will increase with advancing gestation. The same volume loading increases distension of the left atrium and thereby risk of atrial fibrillation. In the context of diastolic disease, the volume changes and increased heart rate are not well tolerated, aggravating symptoms of dyspnoea and lowering the threshold for developing left heart failure.

At the time of delivery, cardiac output increases further secondary to auto-transfusion of blood from the contracting uterus and increased catecholamine levels. There is also an increase in heart rate secondary to blood loss, pain and stress, while the expulsive efforts during delivery tend to diminish venous return. All of these physiological changes lead to an increase in LVOT gradient and shorten the diastolic filling period, therefore increasing the risk of pulmonary oedema.

During pregnancy, plasma volume and cardiac output increase. The increase in cardiac output in the first and second trimesters is achieved by a larger stroke volume, while later in pregnancy there is an increase in heart rate. The additional volume load of pregnancy causes enlargement of the ventricular cavity, which theoretically might reduce the LVOT obstruction; however, the increased cardiac output tends to counteract this effect and the LVOT gradient will increase with advancing gestation. The same volume loading increases distension of the left atrium and thereby risk of atrial fibrillation. In the context of diastolic disease, the volume changes and increased heart rate are not well tolerated, aggravating symptoms of dyspnoea and lowering the threshold for developing left heart failure.[5]

Medications

Beta blockers are considered safe during pregnancy and should be continued if already used before pregnancy and should be considered in those patients with more than mild LVOTO and/or maximal wall thickness 15 mm to prevent sudden pulmonary congestion during exertion or emotional stress. Beta blockers can be used for rate control in AF and to suppress ventricular arrhythmias. Verapamil can be used as a second choice when b-blockers are not tolerated in general, antiarrhythmic medications should be avoided if possible, during the first trimester. Disopyramide, despite being a category C drug from the former FDA classification, should only be used when potential benefits outweigh risks because it is related to some relevant adverse effects, namely, uterine contraction and placental abruption.[6]

Peri operative considerations

Aim is to maintain good preload to avoid worsening of LVOT obstruction. Central venous pressure monitoring Arterial line for BP monitoring. Lateral decubitus or slight left tilt to avoid supine hypotension. Oxytocin must be given in carefully because of its vasodilation (and compensatory tachycardia) and the abrupt inflow of a large amount of blood into the systemic circulation (central blood volume increase of 10-25%) as a consequence of uterine contraction that can adversely affect cardiac performance. Regional anaesthesia: may be dangerous since vasodilation associated with sympathetic blockade of the lower extremities may lead to a critical reduction of preload and afterload. For treating hypotension with spinal anaesthesia, vasopressors with short onset, short duration of action, and predictable dose-dependent responses are ideal. Phenylephrine is primarily an alpha-1 adrenergic agonist with minimal to no beta-adrenergic activity.

It elevates MAP by causing venous and arterial vasoconstriction and increasing cardiac preload without any significant direct effect on cardiac myocytes, thus avoiding tachyarrhythmias. Therefore, phenylephrine has become the preferred vasopressor in this setting. Epidural anaesthesia (±spinal) has been used safely for vaginal delivery in patients with HCM. LSCS can be safely managed with carefully titrated epidural anaesthesia, using CVP monitoring and maintaining euvolemia or slight hypervolemia. (Graded epidural).

Low blood pressure should be promptly evaluated with echocardiography to assess for LVOT obstruction.[7] Continue beta-blockade or diltiazem /verapamil through delivery and postpartum. Careful monitoring is recommended particularly in the immediate peripartum period when large fluid shifts can lead to acute pulmonary edema as occurred in this case. In the setting of acute heart failure, therapeutic aims are similar to those in nonpregnant women, and both intravenous diuretics and vasodilator

CONCLUSION

This case emphasises close monitoring and multidisciplinary team management in high risk HOCM mothers. Pre pregnancy evaluation, risk assessment, multi- disciplinary approach and genetic counselling are stressed upon. Although pregnancy is well tolerated by HCM patients, related hemodynamic burdens may lead to unfavourable events requiring close monitoring and adequate treatment.

References

1. Sikka P, Suri V, Chopra S, Aggarwal N, Saha SC, Bansal R, et al. Hypertrophic Cardiomyopathy and Pregnancy: A Retrospective Analysis from a Tertiary Care Hospital. Tex Heart Inst J. 2022;49(5):e207427.
2. Schinkel AF. Pregnancy in women with hypertrophic cardiomyopathy. Cardiol Rev. 2014;22(5):217-22.
3. Hari A, Zulfeen M, Madhavaneni S. Hypertrophic Obstructive Cardiomyopathy and Pregnancy: A Clinical Case Series. Indian J Cardiovascular Dis Women WINCARS. 2018;193-7.
4. Marian AJ, Braunwald E. Hypertrophic Cardiomyopathy: Genetics, Pathogenesis, Clinical Manifestations, Diagnosis, and Therapy. Circ Res. 2017;121(7):749-70.
5. Pieper PG, Walker F. Pregnancy in women with hypertrophic cardiomyopathy. Neth Heart J. 2013;21(1):14-8.
6. European Society of Gynecology (ESG), Association for European Paediatric Cardiology (AEPC), German Society for Gender Medicine (DGesGM), Regitz- Zagrosek V, Blomstrom Lundqvist C, Borghi C, et al. ESC Guidelines on the management of cardiovascular diseases during pregnancy: the Task Force on the Management of Cardiovascular Diseases during Pregnancy of the European Society of Cardiology (ESC). Eur Heart J. 2011;32(24):3147-97.
7. Park K, Bairey Merz CN, Bello NA, Davis M, Duvernoy C, Elgendy IY, et al. American College of Cardiology Cardiovascular Disease in Women Committee and the Cardio-Obstetrics Work Group. Management of Women with Acquired Cardiovascular Disease from Pre-Conception Through Pregnancy and Postpartum: JACC Focus Seminar 3/5. J Am Coll Cardiol. 2021;77(14):1799- 81

HYSTEROSCOPIC MORCELLATION – A CASE REPORT USING THIS NOVEL TECHNIQUE

Dr.K.S.Rajarajeswari, ACHD/O&G.

Fibroids are the common benign tumors of the uterus and surgeries for fibroids are one of the commonest procedures performed. Conservative surgeries like myomectomy is performed when the woman is desirous of retaining the uterus. Among the different types of fibroids, submucous fibroids are surgically challenging to deal with. Among the different routes of myomectomy viz open myomectomy, laparoscopic myomectomy and hysteroscopic myomectomy, hysteroscopic route is the ideal route for submucous fibroids. As we are using a natural orifice to remove and there is no breach in the uterine layers, which is important in women desirous of pregnancy. If we use other routes to remove a submucous fibroid, there will be breach in all the layers of uterus which causes a weak scar that may not withstand pregnancy. Technical advancement in the recent years has made, hysteroscopic myomectomy feasible.

Hysteroscopic myomectomy is usually done using an instrument called a hysteroscopic resectoscope. Standard resection uses an electrosurgical wire loop to cut the fibroid into smaller pieces and then, these pieces have to be removed at the end of the procedure.

HYSTEROSCOPIC MORCELLATION – A CASE REPORT USING THIS NOVEL TECHNIQUE

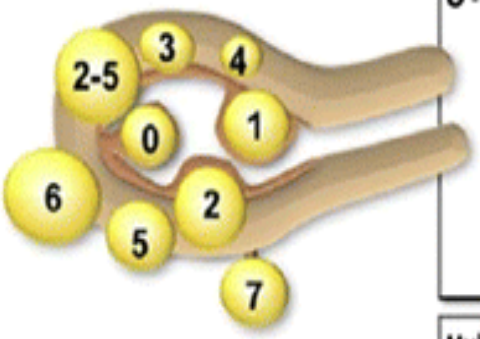
The newer modality – the Hysteroscopic Morcellator uses mechanical cutting phenomenon to reduce the fibroid into small chips and consequently evacuates these chips out of the uterine cavity by aspiration which is done simultaneously. Hence there is no use for electrosurgical loop and there is no need for extra procedure to remove the bits, thereby reducing the operating time, less visual field obstruction and we can avoid the complications of electro surgery like fluid overload. Disadvantages of this newer modality is its inability to coagulate bleeding vessels encountered during surgery. Moreover, this cannot be used for the treatment of type 2 submucous fibroids, and hysteroscopic morcellators are expensive when compared to resectoscope. Hysteroscopic morcellator consists of a set of 2 metal, hollow, rigid tubes, the inner tube fitting within the outer tube. The inner tube rotates with in the outer tube, driven mechanically by an electrically powered control unit. The surgeon can activate the rotation and regulate the direction of the rotation of the inner tube through the use of a foot pedal. The outer tube incorporates, at its distal end, a side-facing cutting window. By means of a vacuum source connected to the inner tube, the resected tissue is then aspirated through the device into a collecting pouch for histopathological analysis.

Polyp
Adenomyosis
Leiomyoma
Malignancy & hyperplasia

Submucosal
Other

Coagulopathy
Ovulatory dysfunction
Endometrial
Iatrogenic
Not yet classified

Leiomyoma subclassification system



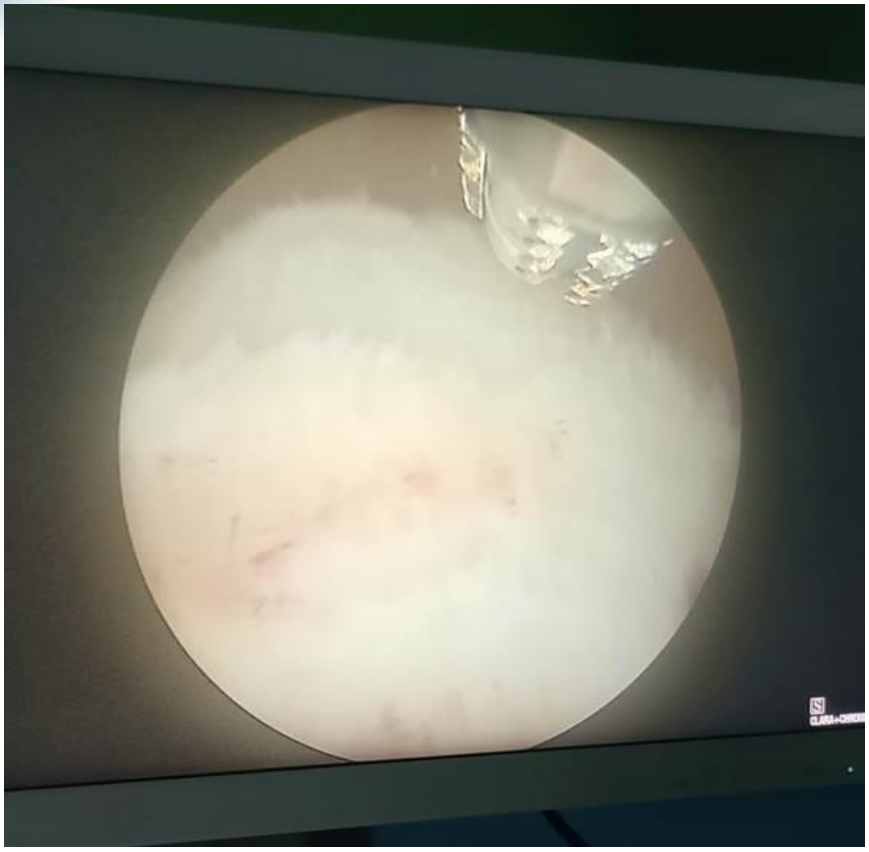
SM - Submucosal	0	Pedunculated intracavitary
	1	<50% intramural
	2	≥50% intramural
O - Other	3	Contacts endometrium; 100% intramural
	4	Intramural
	5	Subserosal ≥50% intramural
	6	Subserosal <50% intramural
	7	Subserosal pedunculated
	8	Other (specify e.g. cervical, parasitic)

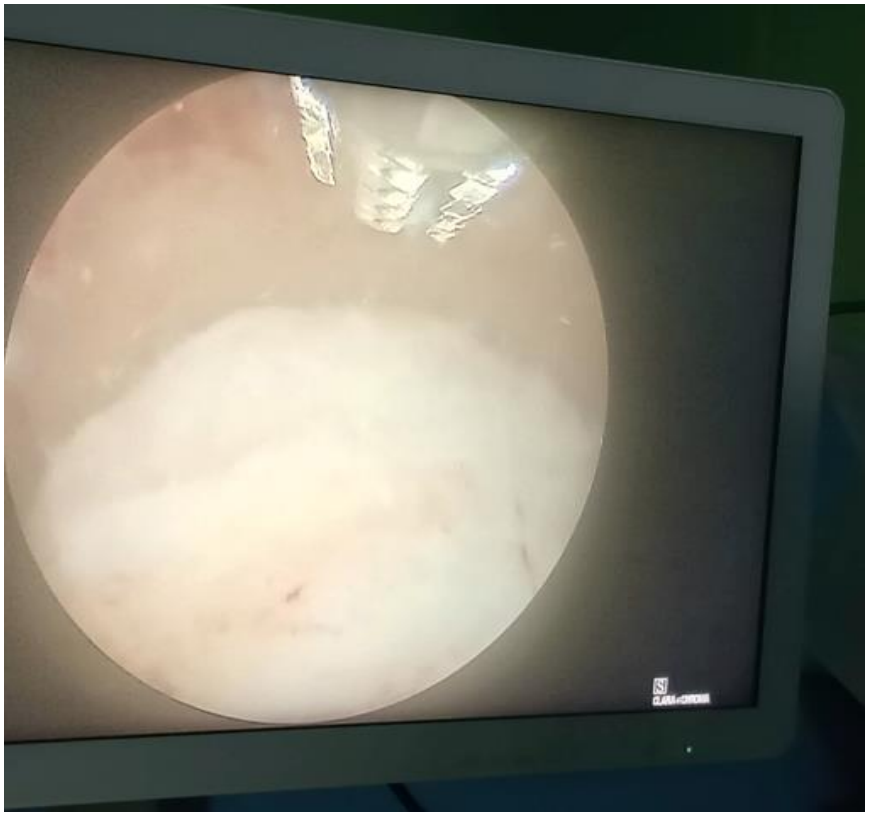
Hybrid leiomyomas (impact both endometrium and serosa)	Two numbers are listed separated by a hyphen. By convention, the first refers to the relationship with the endometrium while the second refers to the relationship to the serosa. One example is below	
	2-5	Submucosal and subserosal, each with less than half the diameter in the endometrial and peritoneal cavities, respectively.

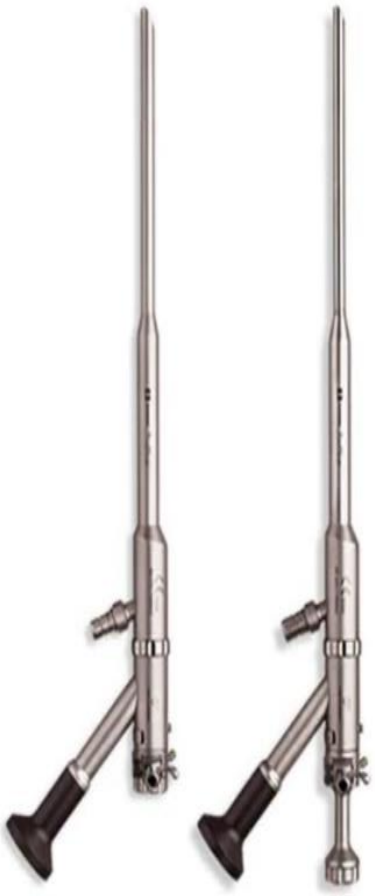
HYSTEROSCOPIC MORCELLATION – A CASE REPORT USING THIS NOVEL TECHNIQUE

CASE REPORT

A 32-year-old married for 1&½ years presented with primary subfertility. On examination was found to have 18-week size uterine fibroid. MRI done for mapping showed a large sub-serosal fibroid measuring 10.8 x 8.8 x 9.7 cm in anterior myometrium (Type 6), *a sub-mucosal fibroid measuring 2.3 x 2.0 cm right posterolateral wall (Type 1),* two intramural fibroids measuring 1.4x1.0 cm in right posterolateral wall and 1.4x1.6 cm in left anterolateral wall. It was decided to deal with the submucous fibroid first and then the other fibroids in the second sitting. Hysteroscopic myomectomy by morcellation planned. A 2.9 mm 30^{o} scope was introduced and a 2x2 cm sub-mucosal fibroid (Type 1) was visualized. Hysteroscopic myomectomy proceeded using TRUCLEAR hysteroscopic morcellator. Sub-mucosal fibroid was shaved off completely. Procedure was uneventful. Post-operatively she was treated with oral Estradiol valerate 2mg twice daily for 10 days for endometrial regeneration and to prevent intrauterine adhesion. Repeat MRI done after 2 months showed complete resection of the sub-mucosal fibroid. It was first of its kind in hysteroscopy at Southern Railway Headquarters hospital.







DEPARTMENT OF DERMATOLOGY

THE PREVALENCE AND PERCEPTIONS OF HAIR OILING PRACTICES AMONG DIVERSE DEMOGRAPHICS IN INDIA: A CROSS-SECTIONAL STUDY

DR J CHITRA, DR LALITHA, DR SENKADHIR VENDHAN, DR RAJESH KUMAR GODUGULA

Abstract

Introduction

Hair oiling is a traditional practice deeply rooted in Indian culture, involving the use of various oils believed to benefit hair health. Despite its long-standing popularity, hair oiling has become a topic of debate among dermatologists due to the potential benefits and risks associated with it, as well as the rise of modern hair care products and influence from social media.

Aims and Objectives

This study aims to evaluate the prevalence, frequency, and motivations behind hair oiling practices among a diverse demographic in India. It also explores how family traditions, social media, and dermatological advice shape these practices.

THE PREVALENCE AND PERCEPTIONS OF HAIR OILING PRACTICES AMONG DIVERSE DEMOGRAPHICS IN INDIA: A CROSS-SECTIONAL STUDY

Methodology

A cross-sectional survey was conducted over a year, targeting individuals across various Indian regions through online platforms. Participants, aged 18 and above, completed a survey capturing demographic details, hair oiling practices, motivations, influences (family, social media, dermatologist advice), and any related scalp or hair conditions. Data were analyzed using descriptive and inferential statistics, supplemented with thematic analysis of open-ended responses for qualitative insights.

Results

Out of 1200 participants, 68% reported regular hair oiling, with coconut oil being the most commonly used. Family tradition was the primary influence (80%), followed by social media (25%). Participants cited hair growth (45%), scalp moisture (40%), and hair texture improvement (25%) as key motivations. Notably, 40% experienced issues like dandruff and hair fall post-oiling, yet 70% believed in the practice's benefits. A significant proportion (60%) were open to modifying practices based on professional dermatological guidance.

THE PREVALENCE AND PERCEPTIONS OF HAIR OILING PRACTICES AMONG DIVERSE DEMOGRAPHICS IN INDIA: A CROSS-SECTIONAL STUDY

Conclusion

Hair oiling continues to be prevalent and culturally significant in India, influenced by both tradition and modern factors. This study highlights the need for evidence-based dermatological advice that respects cultural practices while addressing contemporary hair care concerns.

Limitations

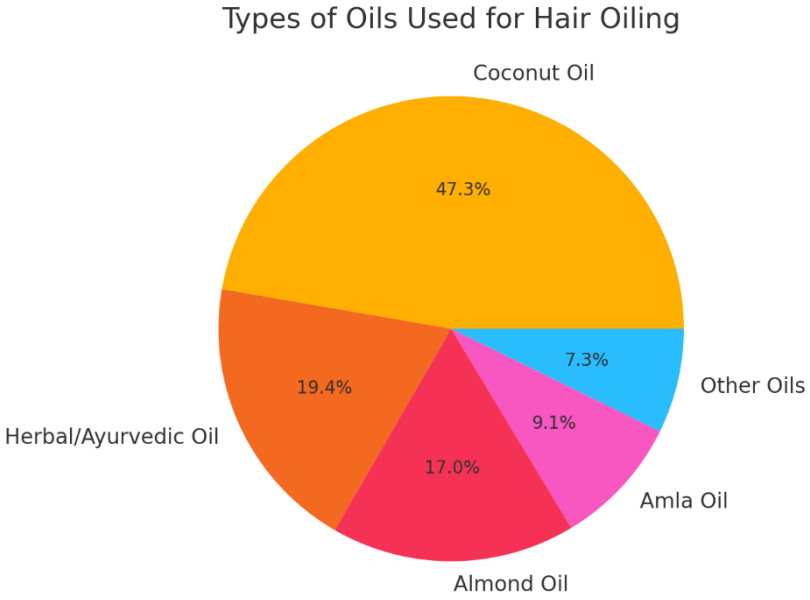
This study relies on self-reported data, with regional bias favouring Southern states due to cultural practices. The online survey introduced demographic and educational biases, overrepresenting younger and highly educated participants. Longitudinal studies are recommended to explore the long-term effects of hair oiling on scalp and hair health.

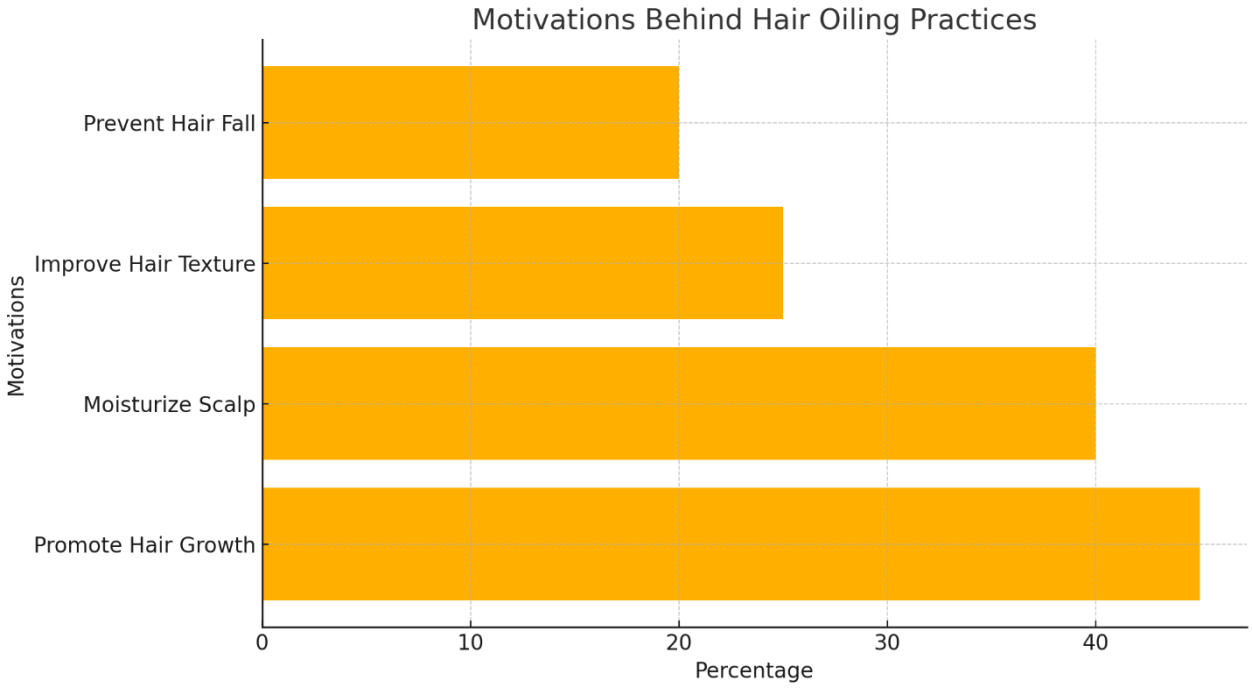
Prevalence and Patterns of Hair Oiling Practices

Parameter	Percentage (%)
Prevalence of Hair Oiling	68%
Frequency of Oiling	
- Daily	8%
- 2-3 times per week	35%
- Weekly	25%
- Occasionally	12%
- Rarely or Never	20%
Types of Oils Used	
- Coconut Oil	78%
- Herbal/Ayurvedic Oils	32%
- Almond Oil	28%
- Amla Oil	15%
Methods of Application	
- Scalp and Hair Strands	65%
- Scalp Only	25%
- Hair Strands Only	10%
Duration Before Washing	
- Less than 1 hour	30%
- Overnight	35%
- More than 24 hours	20%

Motivations, Influences, and Issues Related to Hair Oiling Practices

Aspect	Percentage (%)
Primary Motivations	
- Promoting Hair Growth	45%
- Moisturizing the Scalp	40%
- Improving Hair Texture	25%
- Preventing Hair Fall	20%
Influences on Practice	
- Family Tradition	80%
- Social Media	25%
- Dermatologists	10%
- Advertisements and Friends/Peers	5%
Reported Issues Post-Oiling	
- Dandruff	25%
- Itchy Scalp	15%
- Hair Fall	10%
Belief in Benefits of Hair Oiling	
- Strongly Believe	70%
- Neutral or Skeptical	30%
Openness to Change Based on Advice	
- Willing to Modify Practices	60%


Types of Oils Used for Hair Oiling
Coconut Oil
47.3%
Other Oils
7.3%
Amla Oil
9.1%
Almond Oil
17.0%
Herbal/Ayurvedic Oil
19.4%


Motivations Behind Hair Oiling Practices
Prevent Hair Fall
Improve Hair Texture
Moisturize Scalp
Promote Hair Growth
Motivations
0
10
20
30
40
Percentage

DEPARTMENT OF SURGERY

MULTI-COMPARTMENT DEEP NECK ABSCESSES WITH PHARYNGOCUTANEOUS FISTULA AT SOUTHERN RAILWAY HEADQUARTERS HOSPITAL: A CASE REPORT

Introduction

A deep neck infection is a serious yet treatable condition that affects the deep cervical spaces. It is characterized by rapid progression and can be life-threatening if complications arise. Oropharyngocutaneous fistulas are a rare complication following deep neck space infections. The management of deep neck abscess involves surgical drainage associated with use of intravenous antibiotics. Computed tomography with contrast was the test of choice for diagnosing and assessing the abscess extent.

Case report:

A 46-year-old female with a history of diabetes, irregularly treated for the past 3 months, presented to another hospital with complaints of throat pain, odynophagia, and right-sided pre aricular swelling for 3 days. She was conservatively managed for mumps parotitis. She then presented to our hospital's emergency department with diffuse neck swelling and sudden onset of breathlessness with vitals PR- 116 /mt, BP 100/60mmhg, RR – 36/mt, Temperature – 98.2F, SPO2- 92% at room air.

MULTI-COMPARTMENT DEEP NECK ABSCESSES WITH PHARYNGOCUTANEOUS FISTULA AT SOUTHERN RAILWAY HEADQUARTERS HOSPITAL: A CASE REPORT

The patient was found to be in a severe DKA, leucocytosis and hypokalaemia. She was found to have an elevated white blood cell count of 40,600/uL (normal range: 3.5–11.0 × 10^3/uL) with 88% neutrophils, along with an elevated C-reactive protein level of 138.6 mg/L (normal: ≤ 8.0 mg/L). Her blood glucose was 538 mg/dL (normal range: 65–139 mg/dL), and her hemoglobin A1c was 13.86% (normal range: 4–6%). A CT of the neck revealed a hypodense collection in the right paratracheal region, measuring 30 x 20 x 29 mm, with adjacent air foci extending from the subhyoid region to the superior mediastinum, causing a mass effect on the tracheal rings.

Additionally, a hypodense collection measuring 34 x 10 x 24 mm involved the supraclavicular region in the midline, along with diffuse subcutaneous edema.

She underwent emergency incision and drainage, with approximately 50 mL of pus drained. Pus culture grew E. coli. The histopathology report of the tissue indicated acute inflammation and necrosis, suggestive of an infectious etiology.

Otolaryngologist was consulted and recommended a fiberoptic laryngoscopy (FOL), which revealed a pus-covered area with slough in the right vallecula. Serial suctioning of the pus was performed over 3 days. Despite this, her neck wound worsened, and a repeat CT of the neck. showed residual collection extending into the mediastinum.

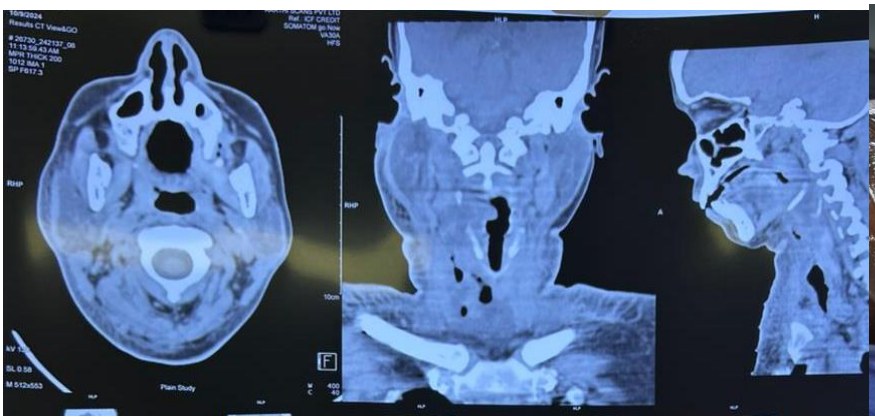
An incidental finding of pulmonary thromboembolism was also discovered, with D-dimer levels of 1538 ng/mL, prompting the initiation of low molecular weight heparin.

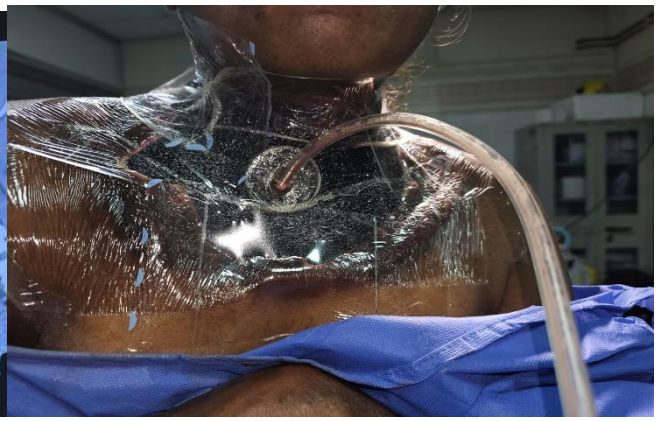
She underwent multiple wound debridement's with VAC dressings applied and was stabilized. Her blood sugars were controlled, and all other parameters gradually improved.

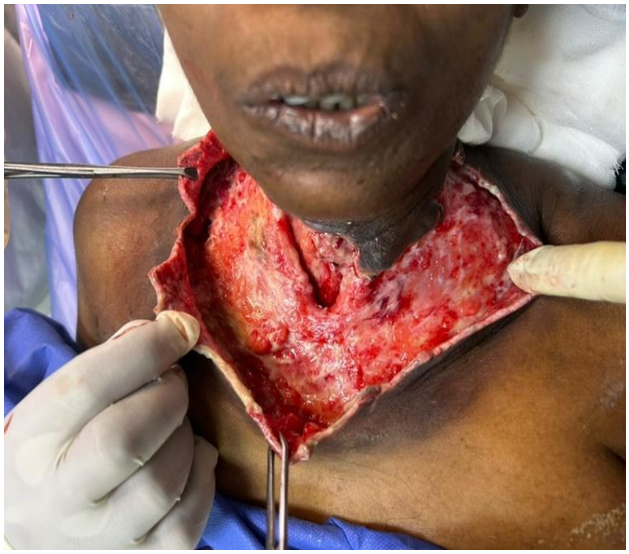
After 4 weeks, a subcutaneous leak and oral intake of fluids from the neck region were observed. Fiberoptic laryngoscopy (FOL) revealed a right pharyngocutaneous fistula. As a result, she was placed on Ryles tube feeding. The patient subsequently underwent right pharyngocutaneous fistula closure with a right pectoralis major muscle (PMC) flap for coverage.

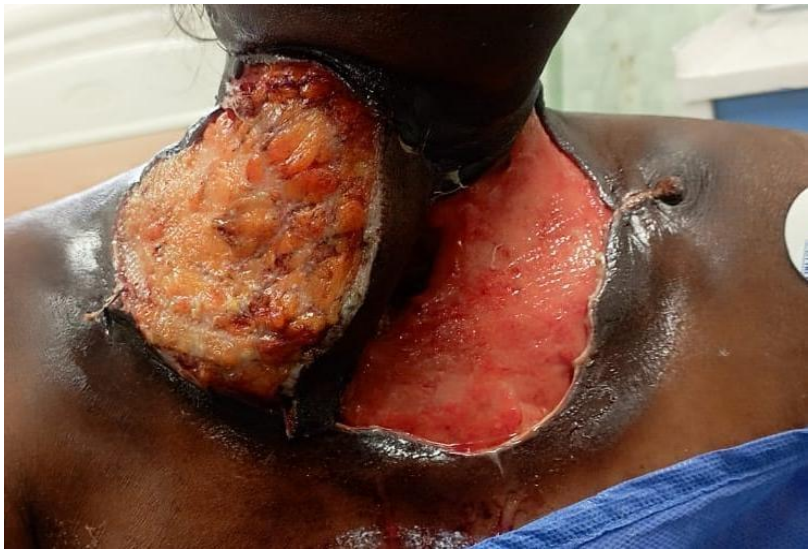
The patient was given total parenteral nutrition (TPN) for nutritional support and received blood transfusions as necessary following the procedure. Two weeks later, she underwent resuturing of the wound dehiscence to control the fistula, along with secondary suturing of the donor site due to infection of the donor flap.

Regular wound dressings were performed, with local hygiene management, and healthy granulation tissue developed. The patient then received split-thickness skin graft (SSG) coverage for the raw area. She was subsequently discharged and followed up on an outpatient basis.









MULTI-COMPARTMENT DEEP NECK ABSCESSES WITH PHARYNGOCUTANEOUS FISTULA AT SOUTHERN RAILWAY HEADQUARTERS HOSPITAL: A CASE REPORT

The implications of this case report are significant for clinical practice, highlighting the importance of a thorough evaluation and management of deep cervical neck abscesses with oropharyngocutaneous fistulas and their associated risk factors. It underscores the necessity for early imaging, such as CT of the neck, and prompt intervention to prevent complications and improve patient outcomes. This case adds to the existing literature on the increasing incidence and offering valuable insights into the management of deep neck abscesses, particularly in the context of diabetic ketoacidosis (DKA) and bacteremia.

"EMERGING CHALLENGES IN GASTROINTESTINAL ONCOLOGY: METACHRONOUS GASTRIC ADENOCARCINOMA FOLLOWING GASTRIC LYMPHOMA THERAPY"

Abstract

Metachronous gastric adenocarcinoma (MGA) following gastric lymphoma therapy presents a rare but significant challenge in gastrointestinal oncology. This case highlights the progression of a 62-year-old male patient diagnosed with MALT (mucosa-associated lymphoid tissue) lymphoma and treated successfully with chemotherapy, only to develop adenocarcinoma in the distal stomach during follow-up. Comprehensive diagnostic tools, including imaging (CT, PET), histopathology, and immunohistochemistry, were crucial in identifying the secondary malignancy. Management involved distal gastrectomy, with histopathological findings confirming moderately differentiated adenocarcinoma with no lymphovascular invasion.

Challenges in early detection and differential diagnosis between primary lymphoma recurrence and new adenocarcinoma were compounded by overlapping clinical and imaging features. This case underscores the importance of vigilant long-term monitoring and a multidisciplinary approach in managing such patients. Timely identification and tailored interventions can improve outcomes in these complex clinical scenarios.

"EMERGING CHALLENGES IN GASTROINTESTINAL ONCOLOGY: METACHRONOUS GASTRIC ADENOCARCINOMA FOLLOWING GASTRIC LYMPHOMA THERAPY"

Case Presentation

A. Patient History and Clinical Presentation

This 62-year-old male, initially presented with complaints of abdominal discomfort and belching. Diagnostic evaluations revealed gastric MALT (mucosa-associated lymphoid tissue) lymphoma, characterized by histopathological findings of lymphoid infiltrates in a nodular pattern. He reported no significant family history of malignancy or autoimmune disorders. The physical examination and routine blood tests were unremarkable, and the primary findings were localized to the gastric region.

B. Details of Lymphoma Treatment and Follow-Up

The patient underwent six cycles of rituximab-based chemotherapy, achieving remission, as evidenced by the absence of metabolically active disease on follow-up PET-CT scans. Histopathological evaluation post-therapy confirmed mild residual chronic inflammation without active lymphoma. Regular follow-up endoscopies showed no significant findings until a later visit revealed mucosal irregularities and growth in the gastric body. A biopsy was performed, showing dysplastic changes suggestive of adenocarcinoma.

C. Diagnostic Tools Used

Advanced imaging modalities, including contrast-enhanced CT and PET-CT, played a pivotal role in tracking disease progression. Initial CT findings showed asymmetric wall thickening in the antropyloric region of the stomach, accompanied by perigastric lymphadenopathy. PET-CT scans confirmed areas of metabolic activity localized to the stomach, indicative of primary lymphoma. Follow-up endoscopic examinations identified irregular growth in the gastric body, with biopsy samples revealing adenocarcinoma. Histopathological examination confirmed moderately differentiated adenocarcinoma with intestinal metaplasia and dysplasia. Immunohistochemistry panels further distinguished the secondary malignancy from recurrent lymphoma.

D. Timeline and Progression from Lymphoma to Adenocarcinoma

The patient was diagnosed with gastric MALT lymphoma and began chemotherapy in early 2022, achieving complete remission by mid-2022. Regular follow-ups were uneventful until late 2023, when imaging and endoscopic findings suggested a transition to adenocarcinoma. A distal gastrectomy performed in early 2024 confirmed adenocarcinoma with no lymphovascular invasion or metastasis. The case highlights a nearly two-year progression from lymphoma remission to the emergence of a secondary gastric malignancy.

Diagnostic Challenges

A. Overlap in Clinical Features Between the Two Malignancies

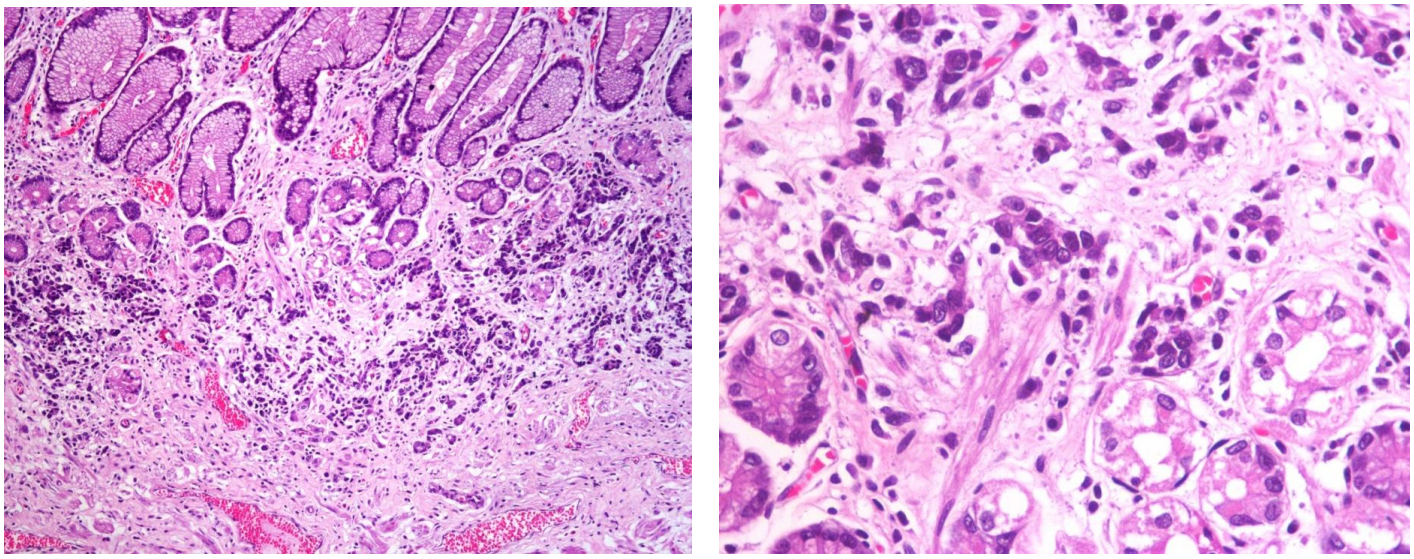
Diagnosing metachronous gastric adenocarcinoma in patients with a history of gastric lymphoma is challenging due to overlapping clinical symptoms such as abdominal discomfort, nausea, and weight loss, which are nonspecific and common to both conditions (Johnson et al., 2018). Moreover, endoscopic findings, including mucosal thickening or irregularities, can mimic residual or recurrent lymphoma, making it difficult to differentiate between the two malignancies without further evaluation (Smith & Brown, 2020). This diagnostic overlap often results in delays in identifying the secondary malignancy, especially when symptoms are attributed to the prior lymphoma or its treatment.

B. Role of Advanced Imaging

Advanced imaging modalities, including contrast-enhanced CT and PET-CT, are essential in distinguishing between recurrent lymphoma and secondary adenocarcinoma. PET-CT, in particular, aids in assessing metabolic activity, with lymphoma often showing diffuse uptake patterns, while adenocarcinoma typically exhibits localized intense uptake (Garcia et al., 2019). In this case, PET-CT revealed metabolic activity in the gastric body with subtle lymphadenopathy, raising suspicion for a secondary malignancy. CT findings of asymmetric wall thickening and perigastric lymphadenopathy, though indicative of malignancy, were nonspecific, underscoring the need for histological confirmation (Lin et al., 2021). Despite its utility, imaging alone is insufficient, as overlapping radiological features can still lead to diagnostic uncertainty.

C. Importance of Histopathological Analysis and Immunohistochemistry Results

Histopathological analysis remains the gold standard for differentiating between gastric lymphoma and adenocarcinoma. Biopsy specimens from the gastric body showed features of moderately differentiated adenocarcinoma, including glandular formation and evidence of intestinal metaplasia, which were distinct from the lymphoid infiltrates seen in MALT lymphoma (Patel et al., 2017). Immunohistochemistry further aids in distinguishing the two malignancies, with markers such as CD20 confirming lymphoma. In this case, analysis ruled out recurrent lymphoma and confirmed the diagnosis of adenocarcinoma. This highlights the indispensable role of histopathology and immunohistochemistry in resolving diagnostic ambiguity and guiding appropriate management.

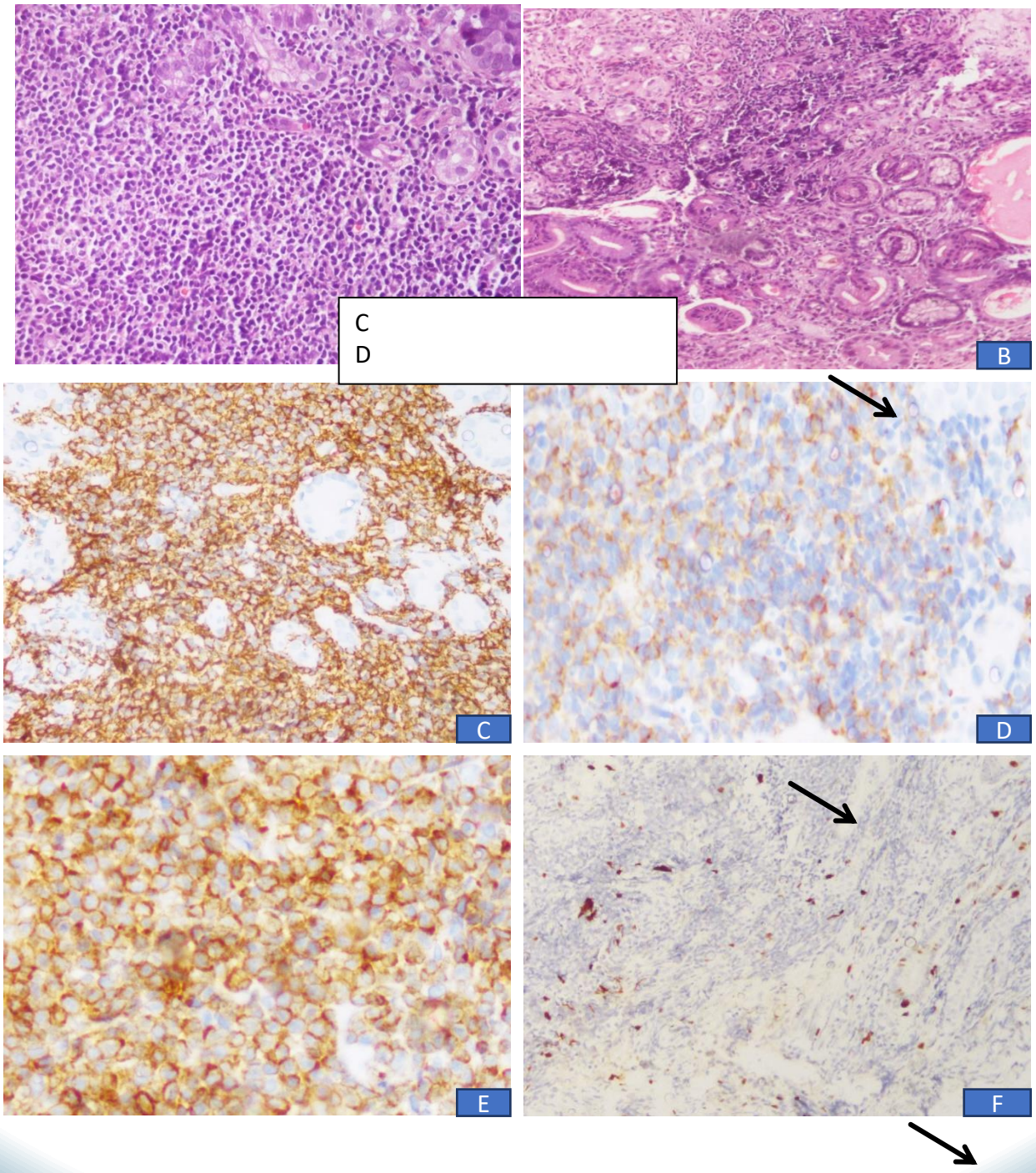


A: Gastric glands being infiltrated by a malignant tumour - H &E x 100

B: Atypical glands displaying hyperchromasia and scant cytoplasm - H &E x 400

- A: Atypical lymphoid infiltrate with cells having scant cytoplasm and enlarged nuclei - H &E x 100
- B: Atypical lymphoid cells infiltrating the gastric glands - H &E x 40
- C: Diffuse positivity for CD20 – IHC x 100
- D: Patchy positivity for CD43 – IHC x 400
- E: Diffuse positivity for BCL 2 – IHC x 400
- F: Ki-67 proliferation index – low – IHC x 40

A



DEPARTMENT OF OPHTHALMOLOGY

A CHOROIDAL EFFUSION FOLLOWING PHACOTRABECULECTOMY DUE TO INADVERTANT USE OF TOPICAL AGM – A CASE REPORT

Trabeculectomy a guarded partial thickness filtering surgery is considered the first choice of surgery to significantly lower intraocular pressure.

Complications of trabeculectomy include chronic hypotony, choroidal effusion, bleb leak and other bleb related complications.

Hypotony allows fluid shift from choriocapillaries to interstitial space causing effusion. Use of perioperative aqueous suppressants is a potential risk factor for hypotony. This case report encounters a patient who uses topical AGM inadvertently after trabeculectomy and gets choroidal effusion and was treated conservatively.

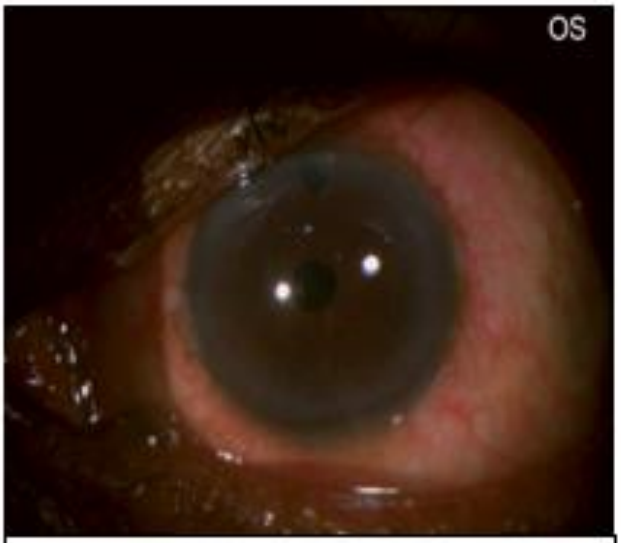
A 65-year-old male complaints of sudden onset defective vision left eye for the past 2 days. Past history: known case of primary open angle glaucoma both eyes; underwent phacoemulsification with trabeculectomy 6 weeks back in the left eye. The intraoperative and immediate postoperative period was uneventful. Upon further investigation into history the patient reveals usage of topical 2% Dorzolamide both eyes.

TREATMENT GIVEN:

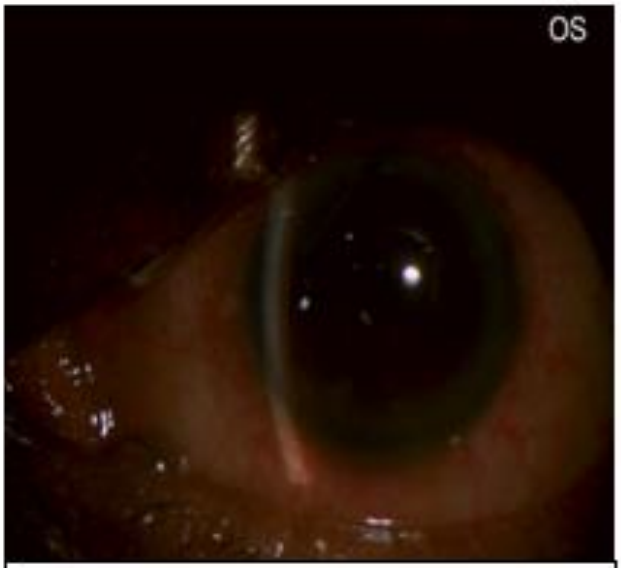
Asked to stop left eye topical AGM immediately and was started on the following topical medications in the left eye: 1% Prednisolone eye drops, 2% Homatropine eye drops (cycloplegic) and 0.1% Nepafenac eye drops(anti-inflammatory).

AT THE TIME OF PRESENTATION

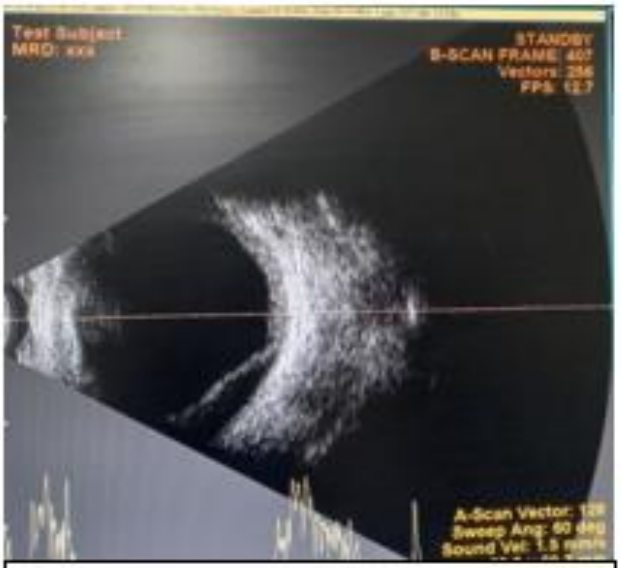
CHOROIDAL FOLDS



SHALLOW AC



SHALLOW AC

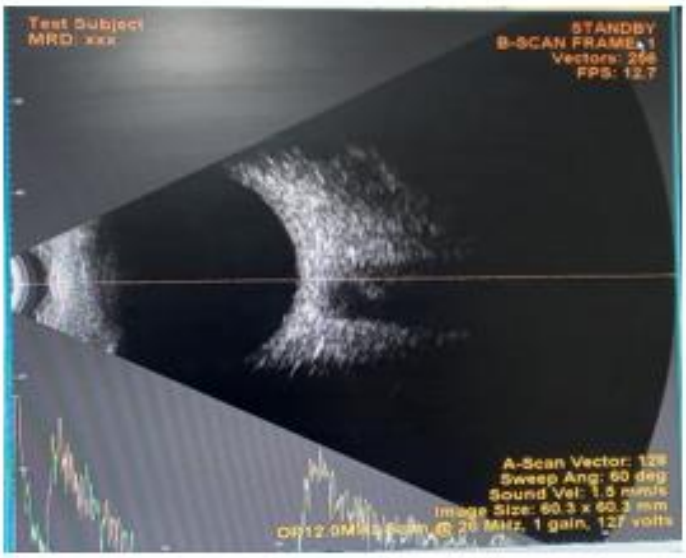


CHOROIDAL EFFUSION

	LEFT EYE (AT PRESENTATION)	LEFT EYE (AFTER TREATMENT)
BCVA	6/36	6/6
IOP (GAT)	10	12
ANTERIOR CHAMBER	SHALLOW	NORMAL DEPTH
FUNDUS	CHOROIDAL FOLDS	NORMAL STUDY
B SCAN	CHOROIDAL DETACHMENT	NORMAL STUDY
OCT	CHOROIDAL FOLDS	NORMAL STUDY

AFTER TREATMENT

RESOLVED CHOROIDAL FOLDS



RESOLVED CHOROIDAL EFFUSION

INTRAVITREAL ANTI-VEGF INJECTIONS FOR VEIN OCCLUSIONS-A VISION SAVING TREATMENT

INTRODUCTION

Retinal vein occlusion (RVO) is vascular disorder of the retina, characterized by the obstruction of retinal veins, leading to impaired blood flow and potential vision loss. Vein occlusion are often unilateral, bilateral cases are infrequent often related to systemic diseases. Here we present a case report on bilateral tributary vein occlusion a rare case report.

RISK FACTORS ;diabetes ,hypertension ,smoking, coagulopathies, ageing, Postmenopausal women

SYMPTOMS; gradual or sudden loss of vision, floaters

INVESTIGATIONS;FFA,OCT

MANAGEMENT; Intravitreal anti- VEGF, laser photocoagulation

WHAT ARE ANTI VEGF?

Antibodies that blocks the actions of vascular endothelial growth factors

Decreases new blood vessel formation, prevent leakage and swelling of retina, thereby stabilize vision.

INTRAVITREAL ANTI-VEGF INJECTIONS FOR VEIN OCCLUSIONS-A VISION SAVING TREATMENT

CASE REPORT

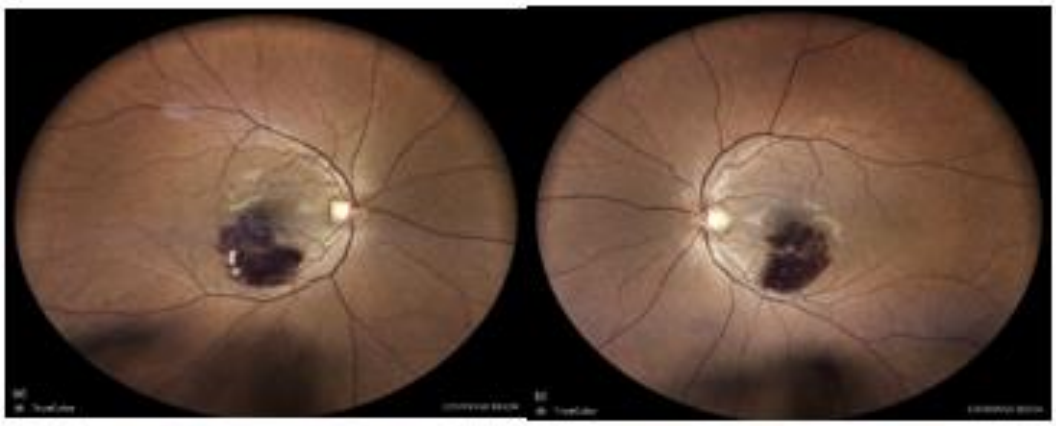
A 42 year old male presented with sudden painless loss of vision in both eyes with no systemic and ocular comorbidities .His best corrected visual acuity was 6/18 in both eyes. Anterior segment examination-within normal limits. Fundus examination –Bilateral tributary vein occlusion in inferotemporal arcades. OCT imaging of both eyes shows macular oedema with FFA imaging shows leakage. Systemic investigations revealed elevated homocysteine levels with decreased protein C and S activity, indicating an underlying hypercoagulable state.

TREATMENT GIVEN;

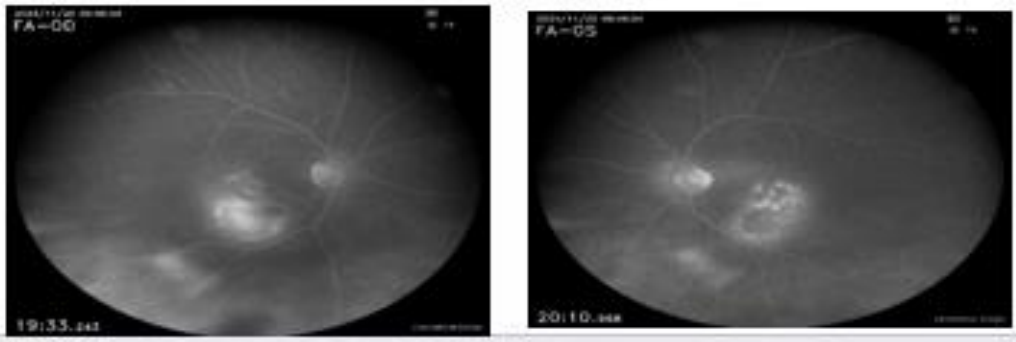
The patient was initiated on systemic therapy for hyper-homo cysteinemia, including vitamin supplementation and anticoagulants, along with intravitreal aflibercept injections in both eyes.

Following treatment, the patient demonstrated significant resolution of macular oedema on OCT along with improvement in visual acuity.

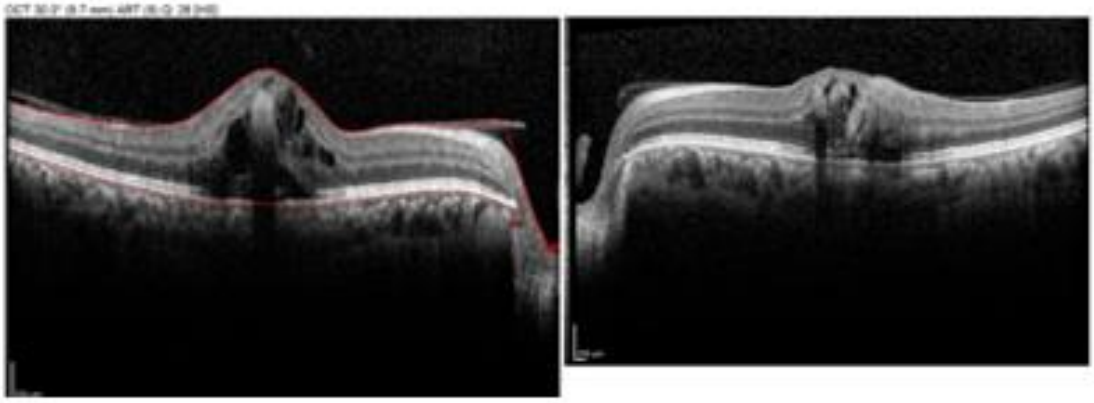
FUNDUS PHOTOGRAPHS OF BOTH EYE SHOWING INFEROTEMPORAL TRIBUTARY VEIN OCCLUSION



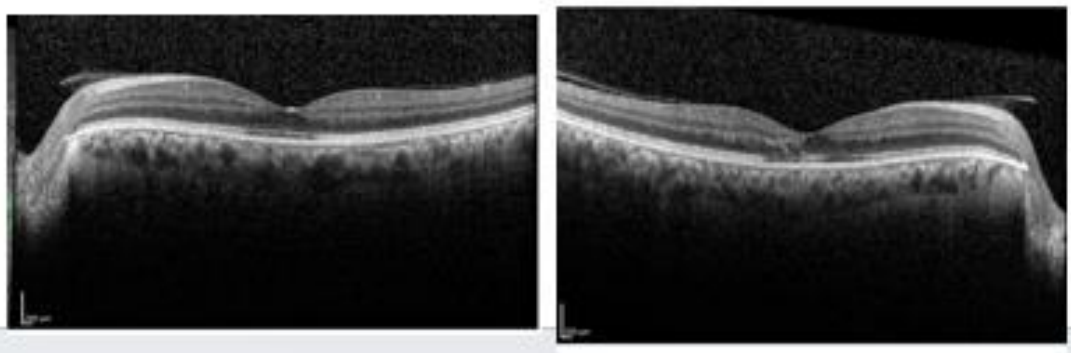
FFA SHOWING LEAKAGE



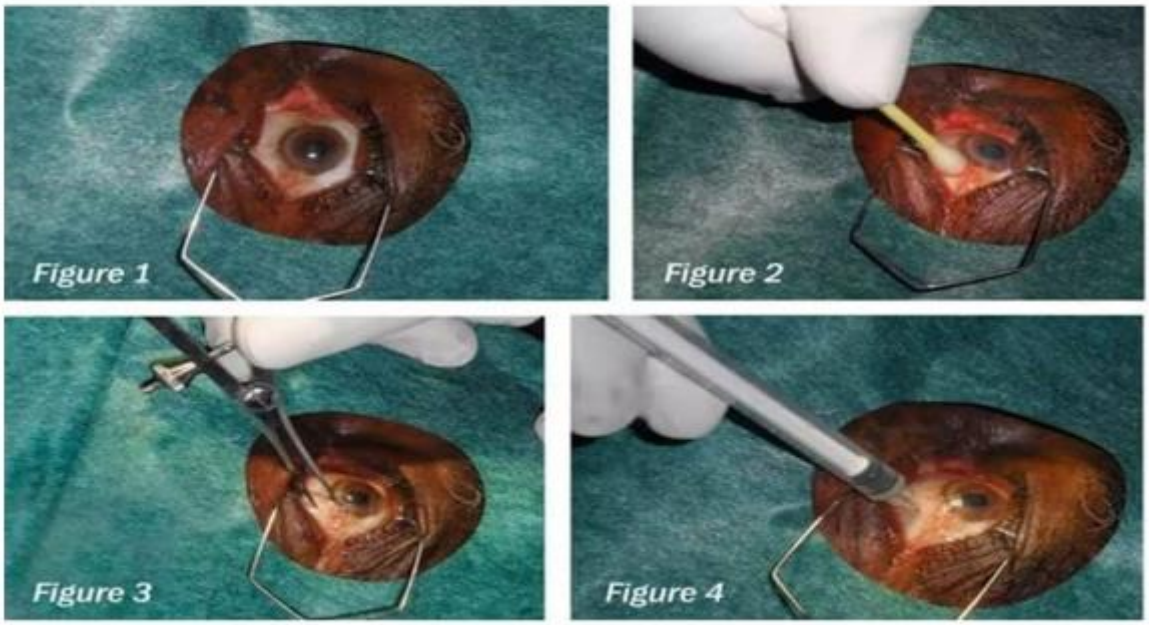
BEFORE ANTI VEGF



AFTER ANTI VEGF



PROCEDURE TO ADMINISTER ANTIVEGF



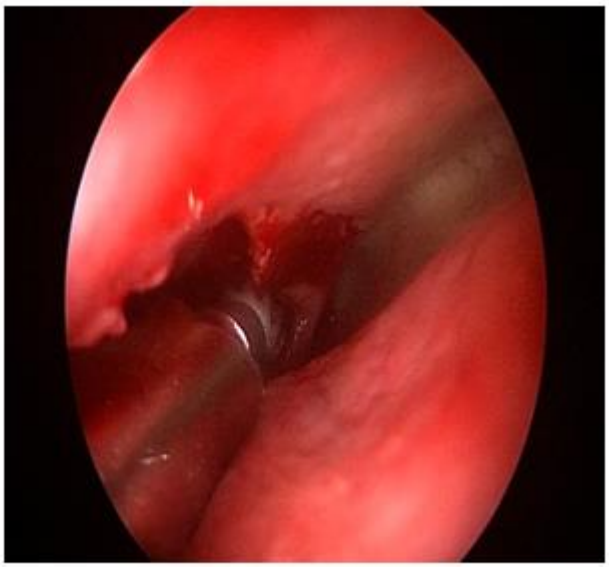
CONCLUSION

The introduction of intravitreal anti-VEGF injections for vein occlusion has significantly improved patient outcomes, enabling clinicians to achieve better visual acuity results, reduce treatment burden, and enhance patient quality of life.

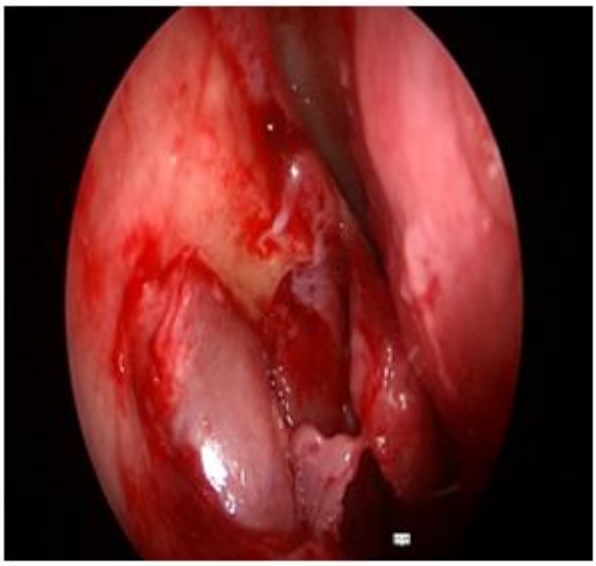
DEPARTMENT OF ENT

Endoscopic DCR:

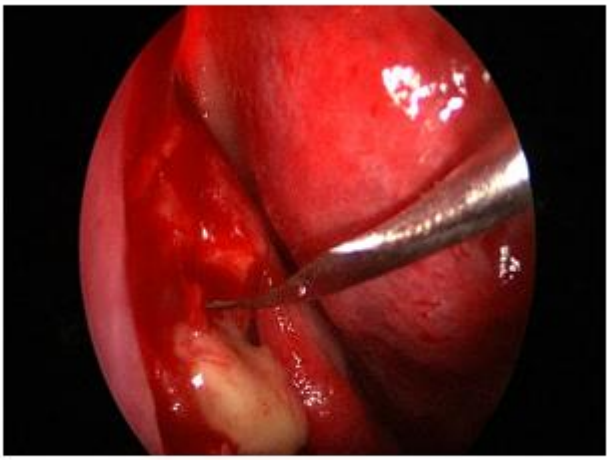
- A 49 year old Female,
- Complaints of epiphora from the right eye for 1 year,
- Diagnostic Nasal Endoscopy and CT Paranasal Sinuses done to obtain anatomic landmarks of the nasolacrimal system.
- Patient prepared for Endoscopic Dacryocystorhinostomy and posted for the surgery under Hypotensive General Anesthesia.
- An incision made over the lateral wall of nasal mucosa and the flap was elevated, lacrimal bone identified the same drilled using DCR bur. Lacrimal sac exposed and incision given over the sac and the pus was drained. Then the superior and inferior lacrimal punctum were dilated and a silicone stent was inserted and pulled endoscopically to keep the canaliculi dilated. The stent will be removed endoscopically 3 months after the procedure.



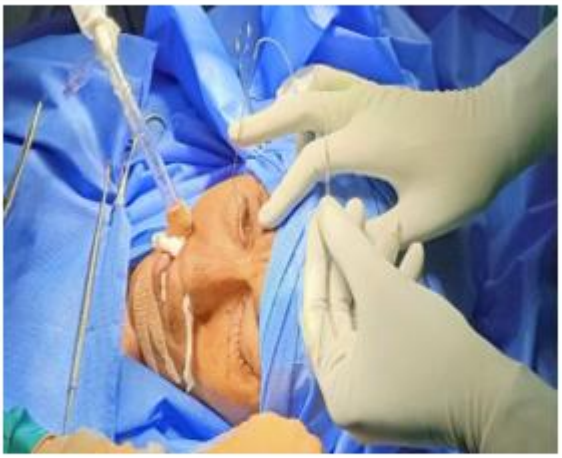
DCR bur used to drill the lacrimal bone



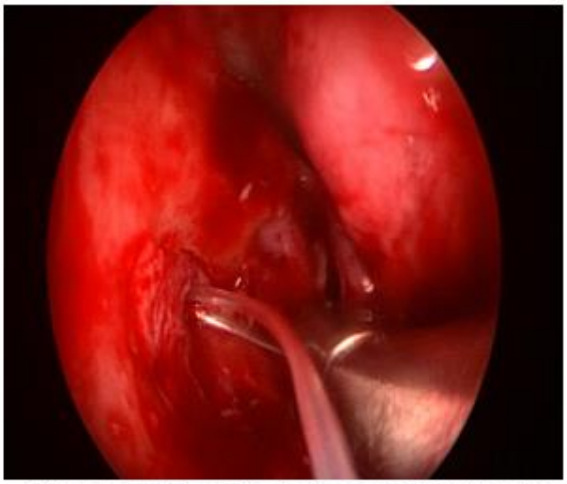
Exposing the Lacrimal sac



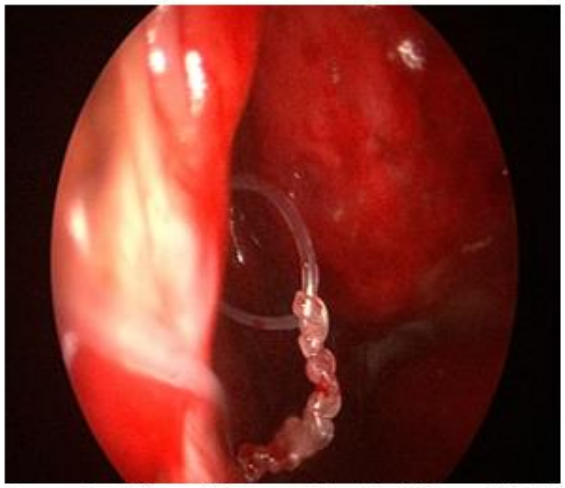
Pus drained from lacrimal sac



Dilation of the lacrimal punctum and insertion of silicone stent



Silicone tubes are passed through superior and inferior canaliculi into the nose via the opening created in the lacrimal sac



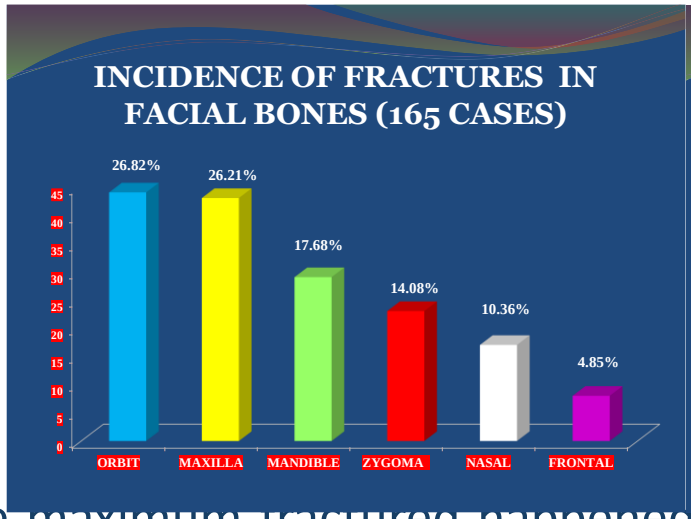
Securing the silicone stent with multiple knots to keep in situ

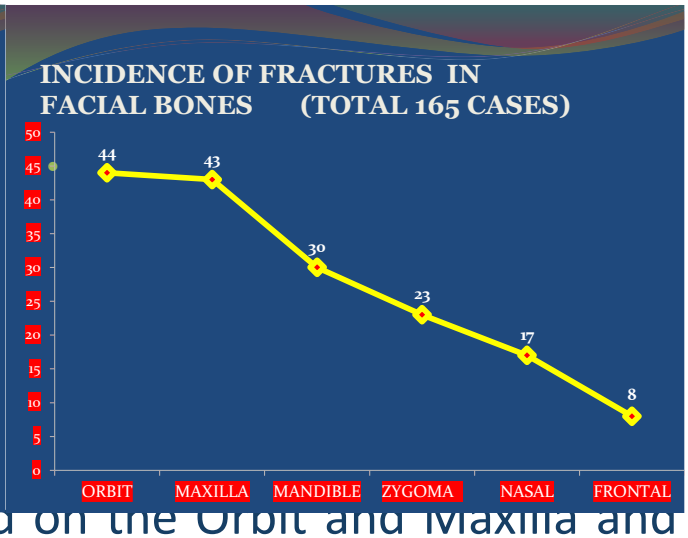
DEPARTMENT OF DENTAL

A STUDY ON INCIDENT OF FRACTURES AMONG FACIAL BONES

DR.A.BABU/ACHD/RH/PER

A statistical study conducted on 165 cases of trauma patients reported to Dental Department over a period of 3 years. The incidence of fractures among Facial bones of these 165 trauma patients showed prevalence of fracture among Facial bones as follows :



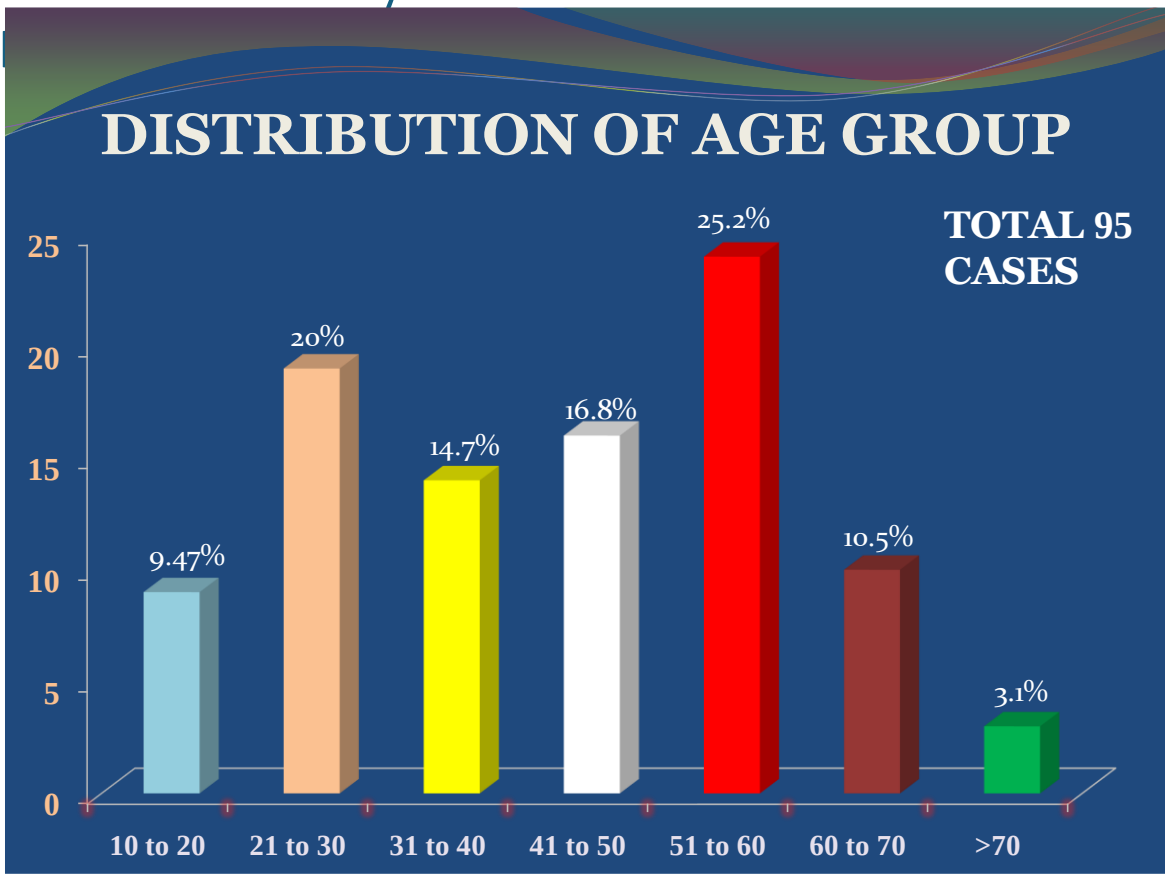


The maximum fractured happened on the Orbit and Maxilla and the least happened on frontal Bone.

A STUDY ON INCIDENT OF FRACTURES AMONG DIFFERENT AGE GROUPS

DR.A.BABU/ACHD/RH/PER

A statistical study conducted on 95 cases of trauma patients reported to Dental Department over a period of 3 years. The incidence of fractures among different age group of patients were analyzed based on every decades of Life. The final result showed the fo



The maximum fractures happened between 51 to 60 years of age and the least happened above 70 years of age.

DEPARTMENT OF DENTAL SURGERY

- DR.A.BABU, ACHD/RH/PER

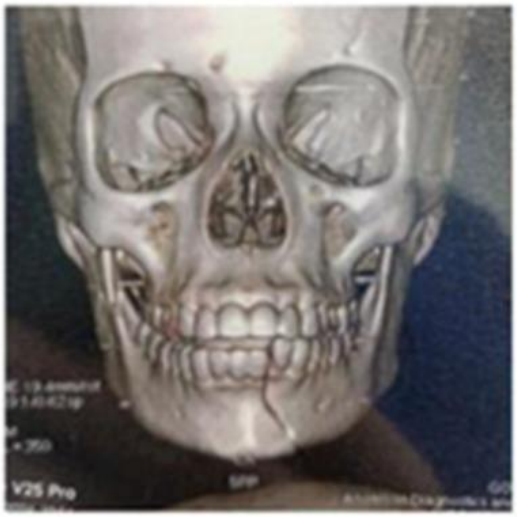
CASE NO:1

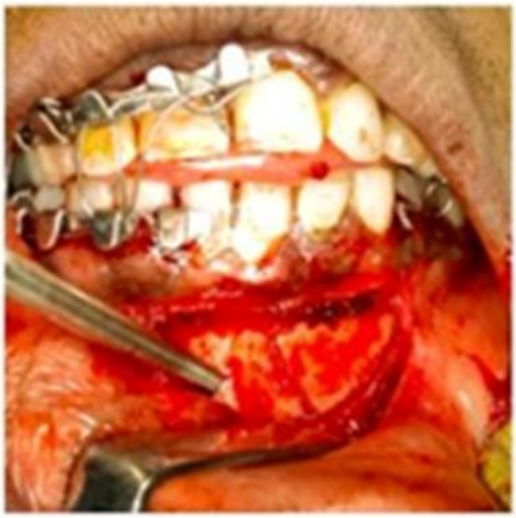
Patient Name: GOWRI 43/f

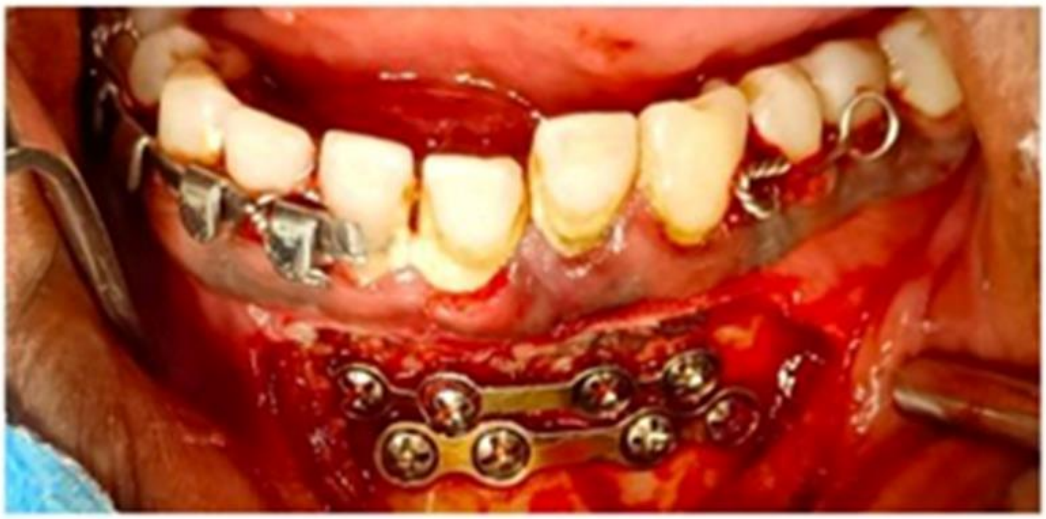
H/O RTA while driving two wheeler.

CT scan finding showed left parasymphysis fracture.

Treatment done: ORIF using 2 Titanium plates and screws under GA.







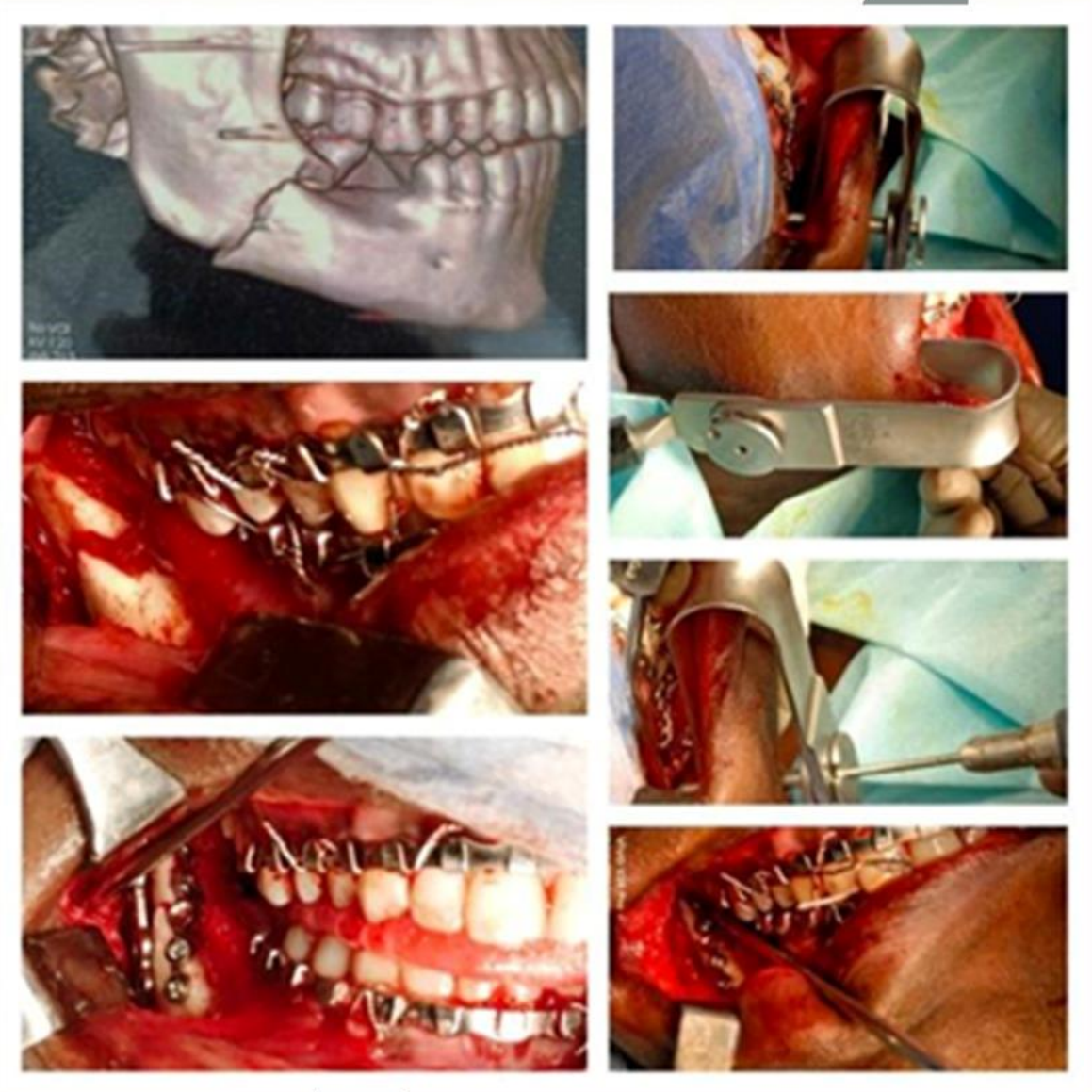
CASE NO:2

Patient name: Narayanan 30/M

H/O self fall from 2 wheeler.

CT scan finding showed Right mandibular angle fracture.

Treatment done: ORIF by using Trocar and 2 titanium plates with screws were fixed under GA.



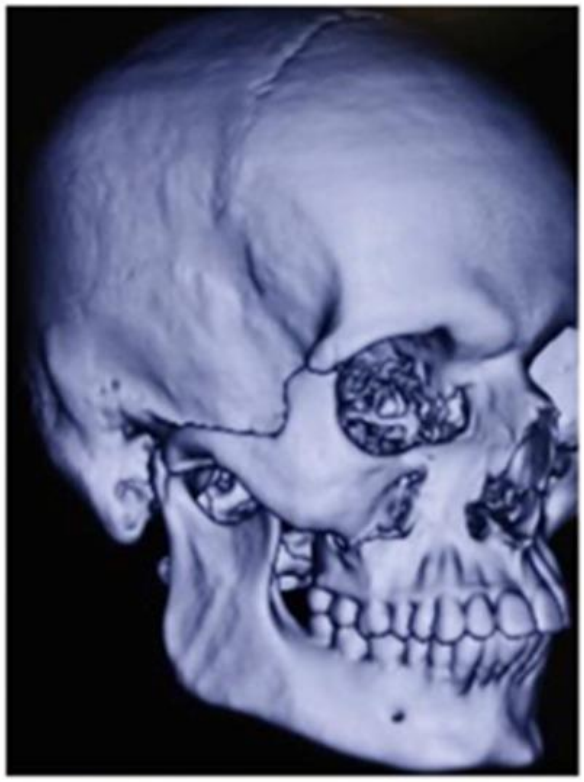
CASE NO: 3

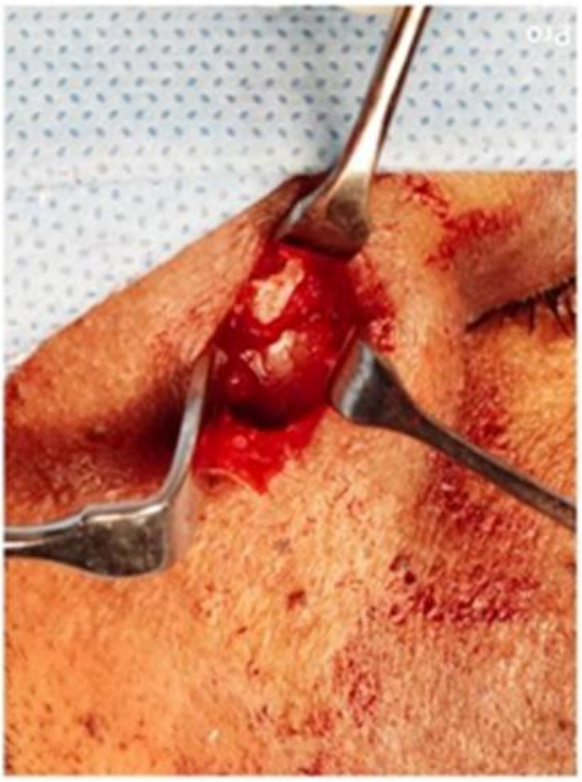
Patient Name: Tamilvanan 43/m

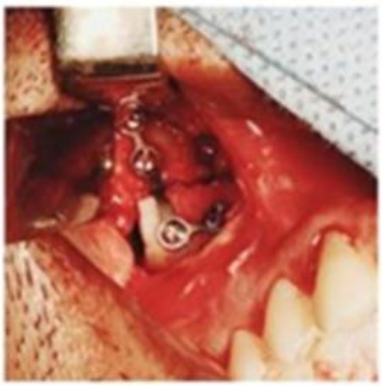
H/O fall from 2 wheeler.

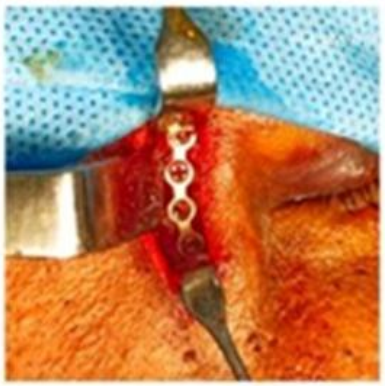
CT scan finding: Fractured anterior wall of Rt. Maxilla and lateral wall of Right Orbit.

Treatment done: ORIF of Maxillary Anterior wall using L shaped Titanium plate and screws and ORIF of Rt. Orbital fracture using 6 hole Titanium plate and screws.









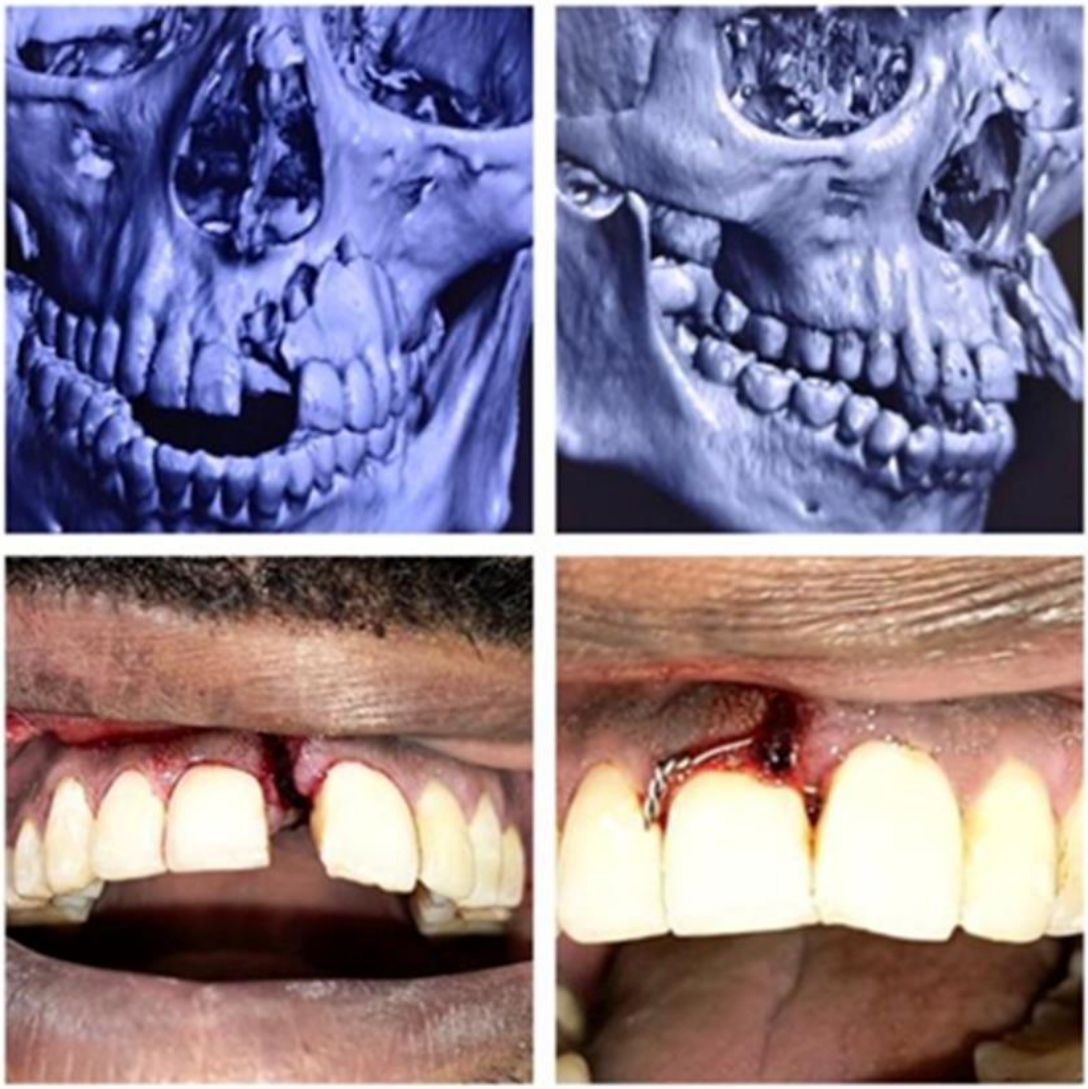
CASE NO: 4

Patient Name: Sushanth 34/m

H/O RTA

CT scan finding showed left Alveolar fracture.

Treatment done: Closed reduction by using 26 Gauge Wiring under LA.



DEPARTMENT OF PEDIATRICS

KIKUCHI-FUJIMOTO DISEASE

INTRODUCTION:

Kikuchi-Fujimoto disease, also known as histiocytic necrotizing lymphadenitis, is a rare yet self-limiting inflammatory condition which primarily affects young and pediatric populations of Asian descent. The typical presentation is acute to subacute, characterized by painful, tender, mobile cervical lymphadenopathy associated with systemic symptoms, including fevers, malaise, weight loss, arthralgias and various skin manifestations resembling tuberculous lymphadenitis, especially in our country which is endemic to TB. An excisional lymph node biopsy is needed for confirming the diagnosis. Immunohistochemistry will demonstrate histiocytes positive for myeloperoxidase and CD68, T cells positive for CD8, and rarely the presence of B cells. It should be distinguished from lymphomas and SLE adenitis. The management primarily involves supportive care for patients, with the use of corticosteroids and immunosuppression only for severe and recurrent cases. The prognosis is excellent, with rare complications such as hemophagocytic lymphohistiocytosis (HLH).

KIKUCHI-FUJIMOTO DISEASE

CASE REPORT:

An 8 year old healthy boy presented to our outpatient department with complaints of left sided neck swelling for the past 15 days which was painful and progressive, associated with low grade fever and anorexia for 10 days. On further probing he was found to have contact with an open case of pulmonary tuberculosis 3 years back. On physical examination, there was marked swelling of the left posterior cervical lymph node, which was 2*2 cm, tender, firm and mobile. No other systemic signs, such as rashes or hepatosplenomegaly, were observed.

The child was initially treated for reactive lymphadenitis with oral antibiotics, but his symptoms persisted. Laboratory tests revealed TLC - 3100 with mild lymphocytic predominance, Hb-10 gm/dl, ESR - 45mm/hr and CRP was negative. Peripheral smear revealed microcytic hypochromic anemia and mild leukopenia with lymphocytic predominance.

Other baseline workup was normal. X ray chest was normal with no hilar lymphadenopathy and Mantoux was non reactive. EBV serology was negative and ANA profile was normal. An ultrasound of the neck showed enlarged, hypoechoic lymph node in left posterior triangle with largest one measuring 2.1*1.4cm.

KIKUCHI-FUJIMOTO DISEASE

An excisional biopsy of the cervical lymph node was performed, and histopathological examination revealed confluent areas of necrosis with karyorrhexis debris mixed with small lymphocytes, clusters of monocytoid cells and histiocytes. No evidence of granuloma with characteristic findings of Kikuchi-Fujimoto disease. Post operatively, the child was managed conservatively with analgesics. At the one-year follow-up, the child remains symptom-free, with no signs of disease recurrence and continues to grow as expected.

DISCUSSION:

Kikuchi-Fujimoto disease, also known as histiocytic necrotizing lymphadenitis, is a rare yet self-limiting inflammatory condition which primarily affects young and pediatric patients. The etiology of Kikuchi-Fujimoto disease remains uncertain and is generally categorized into
2 theories—infectious and autoimmune. Various infectious agents, including viral and bacterial, have been proposed as potential triggers for the disease. However, despite an extensive list of viral suspects, no conclusive evidence of a direct viral cause has been identified till now.

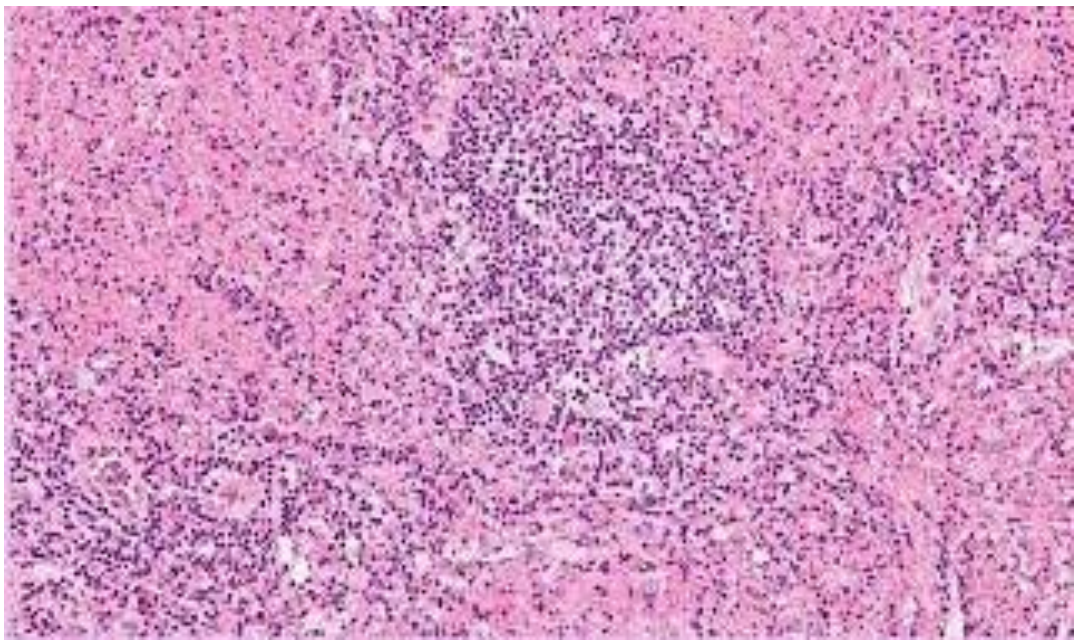
KIKUCHI-FUJIMOTO DISEASE

HLA class II alleles, including HLA-DPA1 and HLA-DPB1 with a higher disease prevalence. It has been associated with various autoimmune conditions, including SLE, Sjögren syndrome, granulomatosis with polyangiitis, rheumatoid arthritis, and Still disease. Among these autoimmune conditions, SLE is the most common association. It is extremely rare, and its exact incidence remains uncertain. Typically, the disease affects individuals of any age group, including pediatric populations, but it most commonly manifests in those under 30.

Diagnosing Kikuchi-Fujimoto disease necessitates an excisional biopsy of an enlarged lymph node. The condition is characterized by 3 histological stages—proliferative, necrotizing, and xanthomatous. During the proliferative stage, there is follicular hyperplasia with infiltrates composed of histiocytes and lymphocytes, with the notable absence of neutrophils and eosinophils. In the necrotizing stage, distinctive features include histiocyte nuclear breakdown (karyorrhexis) and multiple necrotic foci, while the overall lymph node architecture remains intact. Lastly, in the xanthomatous stage, there are foamy histiocytes with the regression of necrotic areas. A notable absence of neutrophils or eosinophils is evident throughout all these stages, which serves as a crucial distinguishing feature between Kikuchi-Fujimoto disease and infectious etiologies. Immunohistochemistry is needed in confirming the diagnosis and differentiating it from other conditions, such as lymphoma.

KIKUCHI-FUJIMOTO DISEASE

The immunohistochemical profile involves positive staining for myeloperoxidase, lysozyme, CD68, CD163, and CD4. No specific treatment is available for Kikuchi-Fujimoto disease, as it typically follows a self-limited course with spontaneous resolution occurring within 6 months. Supportive management with antipyretics and analgesics to alleviate symptoms is the mainstay of treatment. Patients with severe disease may require a prolonged corticosteroid taper after ruling out infectious etiology. Patients require close monitoring to observe for the resolution of symptoms and to screen for the development of autoimmune disease, particularly SLE after the resolution of Kikuchi-Fujimoto disease symptoms.



Lymph node biopsy shows an area of necrosis with lymphocytic infiltration and no granuloma formation.

DEPARTMENT OF PHYSIOTHERAPY

MOVE...TO REMOVE.!

Physio.Kumaravel.M
Asst. Physiotherapy Officer
RH/ PER

Education about the pain is the major part of the treatment. Prevention is better than cure – a proverb. Prevention is the best - a new norm.

In my 34 years of professional career as Physiotherapist, I have treated more number of back and neck pain patients compared to other regional conditions. In my early days of practice, patients who came with symptoms of spinal conditions were mostly middle - aged. Nowadays all age groups inclusive of youngsters and a few school-going children are suffering with pain. There are lines of reasons for spine pain. However, human structure or anatomy is one of the primary causes for the pain.

According to the theory of evolution, human being descended from four legs creatures. Later, humans started to stand on their two legs. When man stands upright with both his feet on the ground, he has to stand against the force of gravity. Thus, posture is boon as well as bane for human race. Due to posture, back bones are affected. We will discuss the most commonly referred white-collar job pain.

Yes... as you assumed it's about the... Neck pain

MOVE...TO REMOVE.!

NECK PAIN

Neck pain is the pain, which occurs in the area of the cervical vertebrae in the neck. Because of its location and range of motion, neck is often left unprotected and subject to injury. Most people have pain, stiffness, kink in neck time to time.

Neck pain is prevalently seen almost globally in persons above 40 years of age. It is the common regional pain syndrome, next to back pain. It occurs early in persons pursuing" white collar Job" are those susceptible to neck strain because of keeping the neck constantly in one position while doing computer works, reading, writing. Now it is common among the public due to the constant use of cell phones too. The victims of Neck pain even include school children due to poor posture.

TREATMENT FOR NECK PAIN

Kindly recall the salient points regarding causes, clinical features of neck pain before planning the treatment. Neck pain is a symptom, not a disease. The pain and the way people react to it; the treatment depends on psychological and social factors apart from the physical condition.

MOVE...TO REMOVE.!

PRINCIPLES OF TREATMENT

The principles of treatment are

1.Elimination of neck pain in acute stage

2.Restoration of normal activities in chronic

3.Prophylaxis- recurrence to be prevented

Methods of Treatment:

1. Conservative care
2. Surgical interventions
3. Education
4.EXERCISES

EXERCISE FOR NECK PAIN

There are many treatment ways such as Electrotherapy, Acupuncture, Ayurvedhic massage, Acupressure, or alternative medicines are used for treating neck syndrome. Most of the people may feel they relieve the pain instantly and hop around to get a cure. But it is not true. Despite all treatment, one may get on and off pain.

No treatment works on muscles and joints. Most of neck pain comes from the moving parts of the neck joints and their activating muscles and ligaments. Hence, exercise is the effective way to treat the neck pain. Many studies concluded that therapeutic exercise is extremely effective to relieve, prevent the recurrence of neck pain and improving functionality.

MOVE...TO REMOVE.!

Role of Exercises in Neck pain management:

- To reduce the pain by increasing endorphin level (Natural pain killer)
- Increase blood flow and circulation.
- Improve the nutrients to joint cartilages and back bone
- To decrease the tension in the muscles.
- To break / prevent the contracture by stretching the elastic soft tissue structures and muscles.
- To reduce the nerve irritability.
- To improve the endurance.
- To correct and improve posture.
- To prevent the recurrence.
- Psychogenic effect : To reduce the stress and anxiety.
- Overall provides a feeling of wellness.

MOVE...TO REMOVE.!

General Instructions:

- ✓ Always better to consult a doctor and physical therapist before you start the exercise.
- ✓ Don't to do any exercise on your own.
- ✓ Exercise is not common for all.
- ✓ Consult a competent physical therapist, since the Therapeutic exercise depending upon the, root cause of the pain, severity of symptoms, age and physical ability, and accompanying medical conditions.

EXERCISES FOR NECK PAIN

Movement is the best medicine for neck pain. Treating neck through exercises specifically designed for strong flexible muscles and joints. These exercises target all the core muscles related to the neck and shoulder to correct posture and alleviate the pain.

Exercises play a pivotal role in the management of neck pain. To mobilize the neck and strengthen the neck muscles once the pain has subsided.

Let us discuss therapeutic exercises in detail that relieve neck pain.

MOVE...TO REMOVE.!

Shoulder Shrugging

Starting position:

Stand or sit over a stool comfortably with hanging arms on sides.

Steps :

- ✓ Slowly lift the shoulder girdles up.
- ✓ Hold for 5 counts.
- ✓ Return to starting position.
- ✓ Number of repetitions 5-10 times twice or thrice a day.

Effects and uses

Helps to relieve muscle tension in shoulder, neck and upper back. Good preparatory cum prophylactic exercise to minimize neck strain people who are working in static position for longer period.

MOVE...TO REMOVE.!

Shoulder Bracing

Starting position:

Stand or sit over a stool comfortably.

Steps :

- ✓ Lift the arm sideways up to the shoulder level.
- ✓ Then bend the elbow horizontally completely.
- ✓ Move the hands towards opposite shoulders tips until feel bracing around shoulder.
- ✓ Open your shoulder and chest as much as possible at shoulder level.
- ✓ Number of repetitions 5-10 times twice or thrice a day.

Effects and uses

Lengthening the shoulders, neck and upper back. Help to improve flexibility and increase range of motion of shoulders. It is an important exercise for posture correction too.

Shoulder Rotation

Starting position:

Stand or sit over a stool comfortably.

Steps :

- ✓ Keep the hand over the shoulders as in the picture.

Rotate the both elbows simultaneously clockwise and anti clock wise.

Slowly cum rhythmically rotate and feel the muscles work.

Number of repetitions: 5...10times in each circle twice or thrice a day.

Effects and uses

Helps to mobilise the joint and increase the range of movement. Strengthen the shoulder muscles.

Primary effect is preventing the soreness of muscles

MOVE...TO REMOVE.!

Neck Tilting

Starting position:

Sit or stand tall.

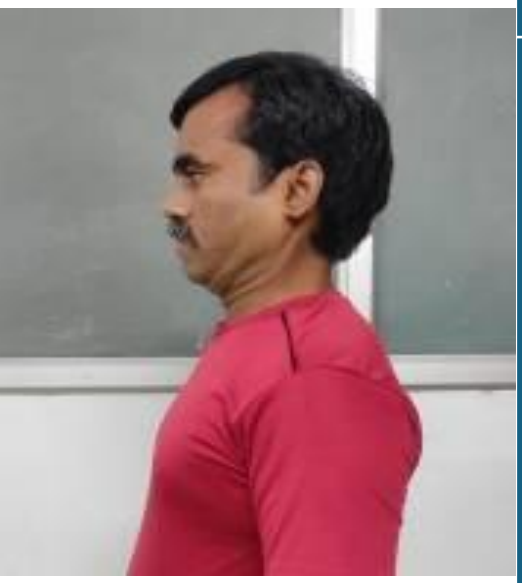
Steps :

- ✓ Slowly turn the head and move the chin towards right shoulder.
- ✓ Hold it for five counts.
- ✓ Return to starting position.
- ✓ Repeat same to do opposite side
- ✓ Number of Repetitions: Do 5..10sets
- ✓ twice or thrice a day

Effects and uses

Good exercise for relieve tightness of the neck. Helps to prevent neck strain, particularly for the people who keep the head in a steady position for long periods during work.

MOVE...TO REMOVE.!



Chin Tuck in & Tuck out

Starting position:

Sit or stand and look straight ahead

Steps :

- ✓ Slowly tuck your chin as glide your head backward until the back of the head touch the wall.
- ✓ And bring the chin close to the neck as in picture above.
- ✓ Hold for 5 counts.
- ✓ Relax for a while.

- ✓ **Then tuck out the chin forward as in picture below.**
- ✓ **Hold for 5 counts.**
- ✓ **Repeat this 5..10 times twice or thrice in a day**

(Note: Don't bend the neck forward or backward while tucking the chin.

To avoid these, stand with back against the wall while practicing initially.

Effects and uses

Stretch the back of the neck and relieve tension on neck muscles. This exercise makes the neck more flexible.

MOVE...TO REMOVE.!

Chin-up and down exercise

Starting position:

Sit on a stool and start by looking straight ahead.

Steps :

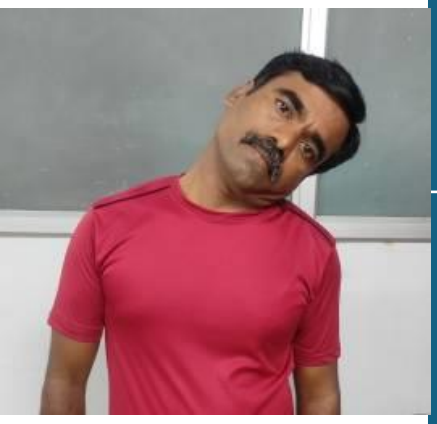
- ✓ Bend the head forward and lower the chin toward the chest.
- ✓ Hold for 5 counts
- ✓ Bend the neck backward and look upward.

  Note : Don't arch the back
- ✓ Hold it for 5 counts.
- ✓ Relax back to origin position.
- ✓ Repeat 5..10 times.
- ✓ Two to three times a day

Effects and uses

Loosen the neck muscles and reduce the tightness. Strengthen the neck muscles and prevent the neck pain on sudden move.

MOVE...TO REMOVE.!



Side flexion exercise	
	Starting position: Sit over a stool with back erect comfortable way. Steps : ✓ Bend your neck either one side try to touch the shoulder with ears.

✓ **Retain for 5 counts.**
✓ **Return to relaxed starting position.**
✓ **Repeat on the opposite side.**

Number of set 5...10 ,Two to three times a day

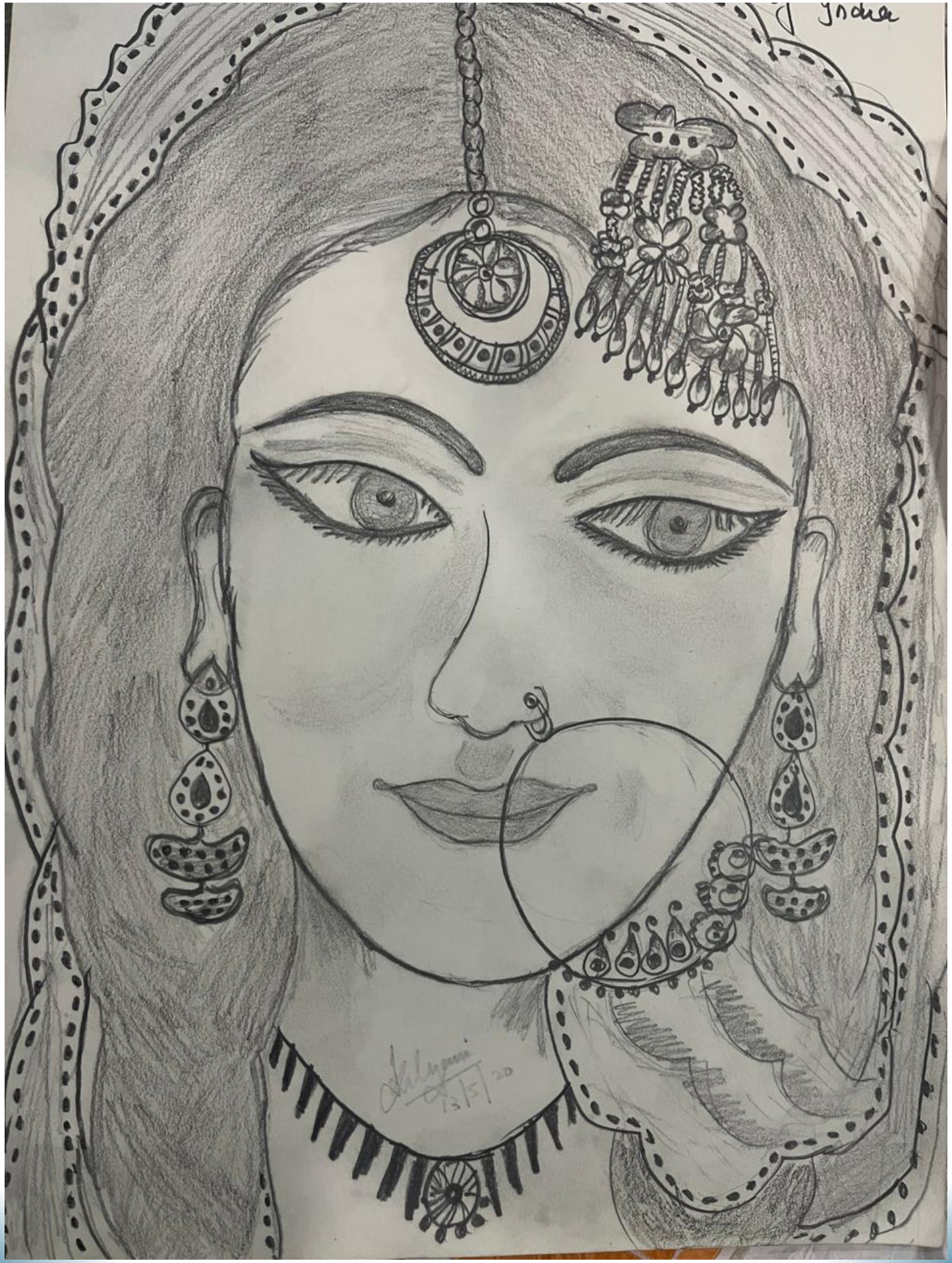
Effects and uses

Loosen the neck muscles and reduce the tightness. Strengthen the neck muscles and prevent the neck pain on sudden move.

TALENTS CORNER

WOMAN - EPITOME OF STRENGTH, RESILIENCE, AND GRACE

DR Kalyani Sai Dhandapani, PCMD SRHQ Hospital



Beauty and the Beast – DR.A.BABU/ACHD/RH/PER

வேண்டும்..! வேண்டும்..!

வறுமை இல்லா உலகம் வேண்டும்..!
வானம் பொய்யா மழையது வேண்டும்..!
கனவு இல்லா தூக்கமும் வேண்டும்..!
நிலவும் கூட அருகினில் வேண்டும்..!
வானம் ஏறிப்பறந்திட வேண்டும்..!
வண்ண மயில்கள் அருகினில் வேண்டும்..!
காட்டு குயிலின் கானங்கள் வேண்டும்..!
அகிலம் கையில் அடங்கவே வேண்டும்..!
நோய்கள் இல்லா பூமியும் வேண்டும்..!
ஏட்டில் இல்லா கவிதைகள் வேண்டும்..!
பணிவு என்னும் பண்பது வேண்டும்..!
பசுமை நிறைந்த நினைவுகள் வேண்டும்..!
நேர்மை கொண்ட வாழ்க்கை வேண்டும்..!
பேசும் பொருளில் கண்ணியம் வேண்டும்..!
சோர்வு இல்லா உள்ளமும் வேண்டும்..!
துணிவு கொண்ட நெஞ்சமும் வேண்டும்..!
புத்தகம் புதிய ஓவியம் வேண்டும்..!
நித்தம் ஒரு காவியம் வேண்டும்..!
என்றும் தளரா மனமது வேண்டும்..!
ஏற்றம் நோக்கியே பயணங்கள் வேண்டும்..!
நெஞ்சம் நிறைவு கொண்டிட வேண்டும்..!
நேர்ப்பட பேசும் பழக்கமும் வேண்டும்..!
பொறுமை கொள்ளும் பக்குவம் வேண்டும்..!
கோபம் கொள்ளா இதயமும் வேண்டும்..!
பயமதை வீழ்த்திட பலமது வேண்டும்..!
பழக இனிக்கும் பண்பது வேண்டும்..!
எல்லா உயிர்களை நேசித்தல் வேண்டும்..!
பிறரின் பிழையை பொருத்திடல் வேண்டும்..!
இன்பம் நெஞ்சில் நிலைத்திட வேண்டும்..!
இருமைகள் என்றும் ஒளிந்திட வேண்டும்..!
மரணம் இல்லா வாழ்வது வேண்டும்..!
ஞானம் என்னும் வரமது வேண்டும்..!

- Dr.A.Babu, ACHD/RH/PER


CHENNAI