

CASE BRIEF

Name: [REDACTED]

Age: 14 years, Female

Address: [REDACTED]

Contact no: [REDACTED]

MRD No: 00189427

Diagnosis: Left sided humerus Osteosarcoma, post chemotherapy.

Date of Diagnosis: August/2020

Surgery: Limb salvage surgery & total humerus allograft reconstruction and plate fixation.

Date of Surgery: 17/03/2021

Family History: Grandmother- Renal cancer
Aunt: Breast Cancer

Surgeon: Dr. Pramod S Chinder (Orthopaedic Oncology)
Dr. Intezar Mehdi (Paediatric Medical Oncologist)

Ref Doctor: Dr. Jalila Al Kendi

BRIEF SUMMARY OF THE EVENTS:

DATE	EVENTS	FINDINGS
July 2020	Pain & swelling-Left arm	Investigated & found to have a lesion- Left humerus
Aug 2020	Biopsy- Humerus	Osteosarcoma.
<ul style="list-style-type: none"> Underwent chemotherapy- 3Cycles of MAP regimen with EURAMOS protocol and 1 week of Inj. Cisplatin and Inj. Doxorubicin of 4 cycles in her native country. Total 5cycles of MAP regimen, 4weeks of high-dose methotrexate chemotherapy at HCG. 		
1 st Feb 2021	MRI	Suggestive of residual disease.
2 nd Feb 2021	PET Scan	Suggestive of residual Osteosarcoma.
3 rd Mar 2021	USG core needle biopsy	Conventional osteogenic sarcoma.
8 th Mar 2021	MRI Right knee	Benign- Non ossifying



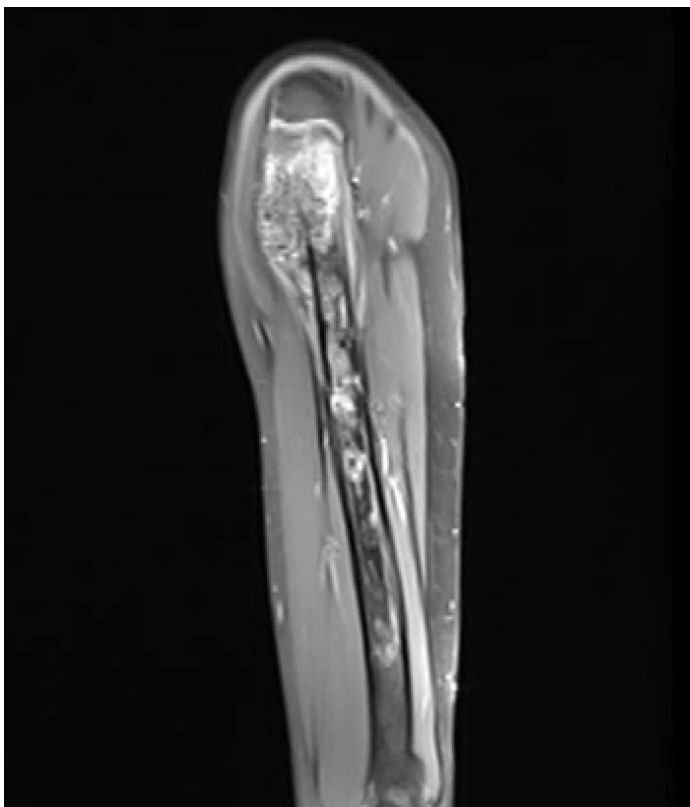
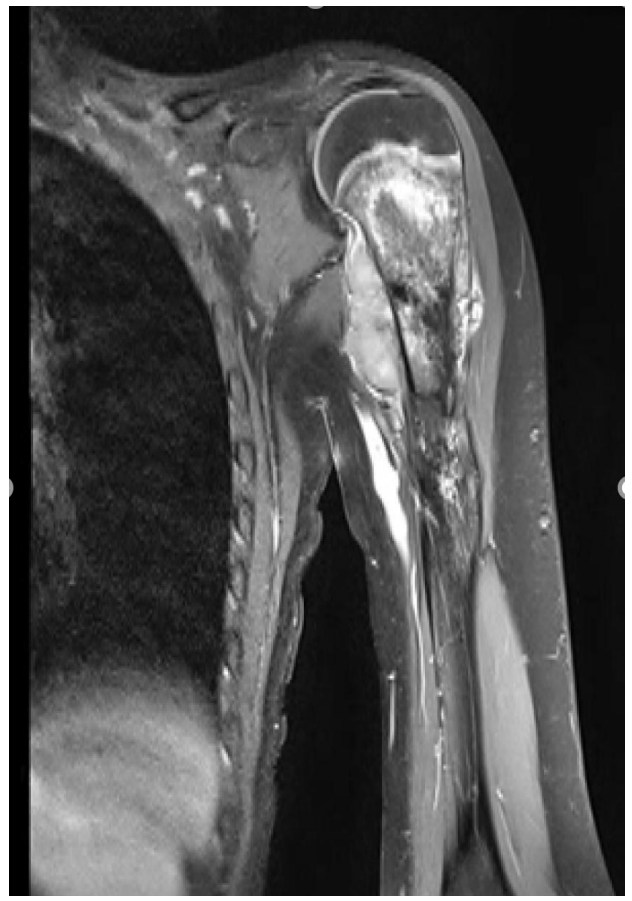
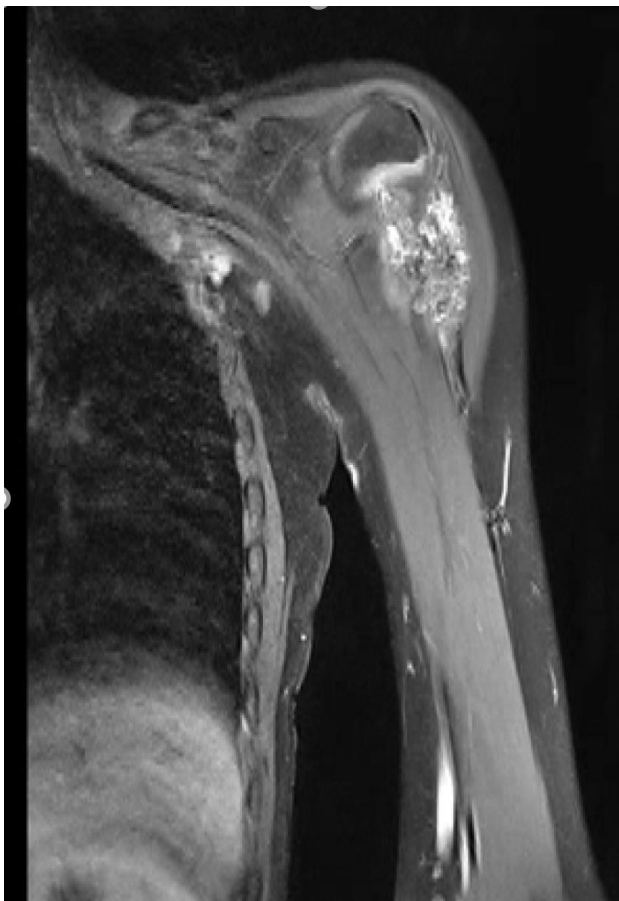
17th Mar 2021	Surgery	Limb salvage surgery & total humerus allograft reconstruction and plate fixation.
17th Mar 2021	HPE	Residual viable Osteogenic sarcoma with free margins- HUVOS Grade IV

X-RAY IMAGES: 01/02/2021





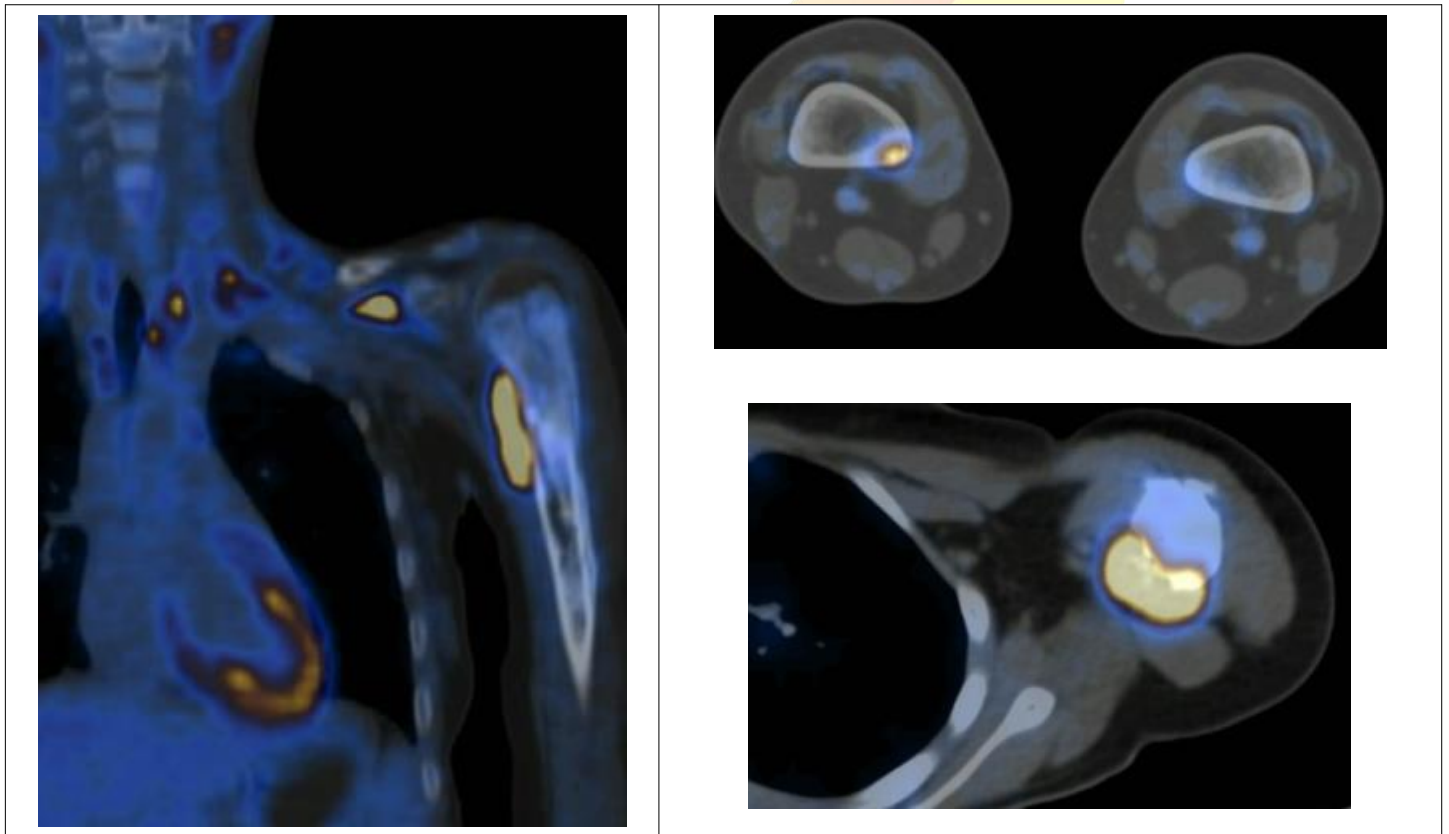
MRI IMAGES: 01/02/2021



Findings:

1	19.8 x 4.5 x 3.5 cm heterogeneously enhancing intramedullary lesion in left humerus with extraosseous soft tissue proximally as described above – suggestive of residual disease.
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PET CT IMAGES: 02/02/2021



Findings:

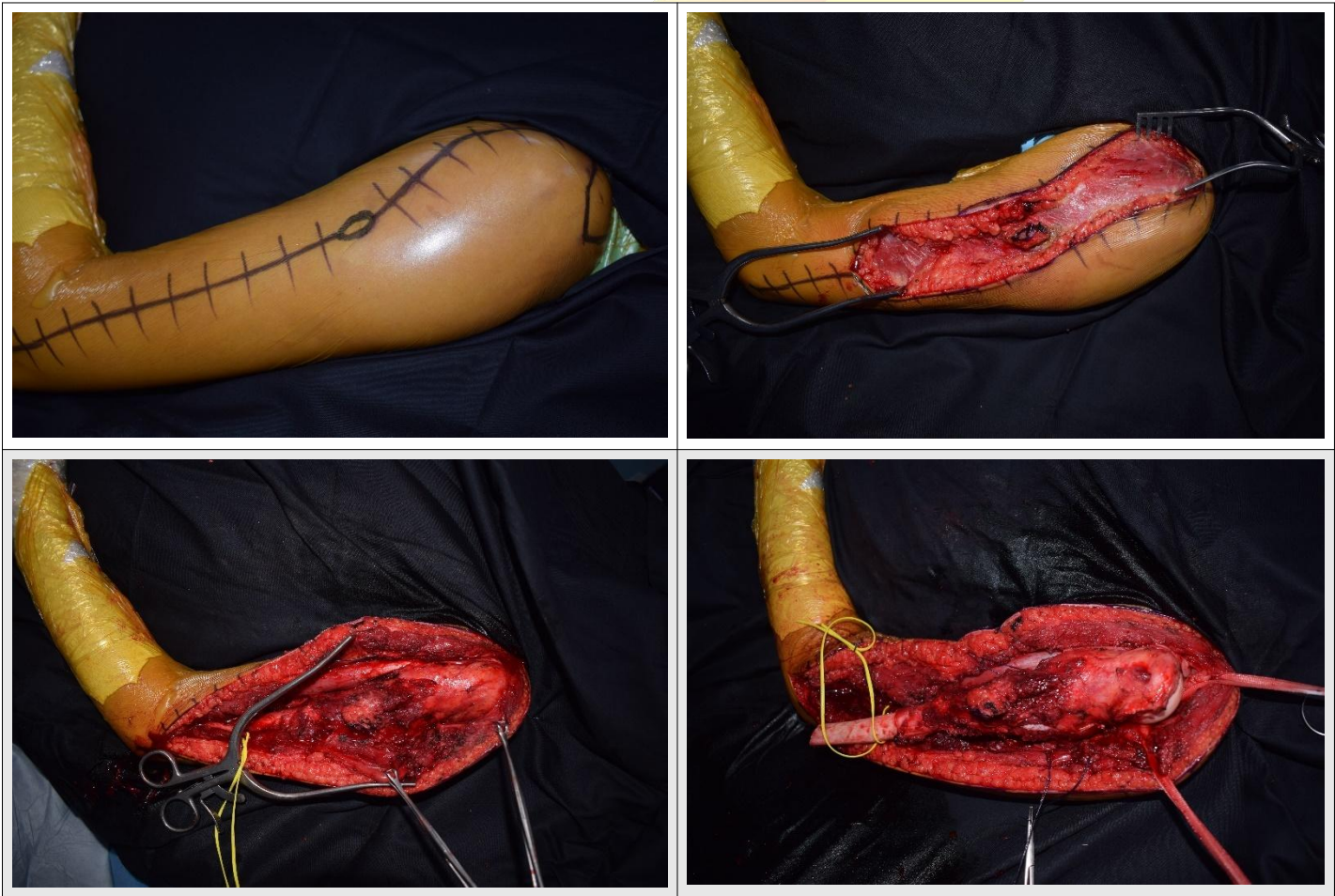
1	19.8 x 4.5 x 3.5 cm metabolically active mixed lytic sclerotic lesion involving the left proximal humeral metaphysis extending into the distal shaft with metabolically active extraosseous enhancing soft tissue adjacent to the proximal metadiaphysis as described above – suggestive of residual osteosarcoma.
2	Few tiny bilateral lung nodules – suspicious for metastases. Recommend direct comparison with prior studies / follow up.
3	1.6 x 0.9 cm well defined eccentric lytic lesion with sclerotic margin involving the right postero-medial distal femoral metaphysis – representing benign chondroid lesion. Recommended follow-up.

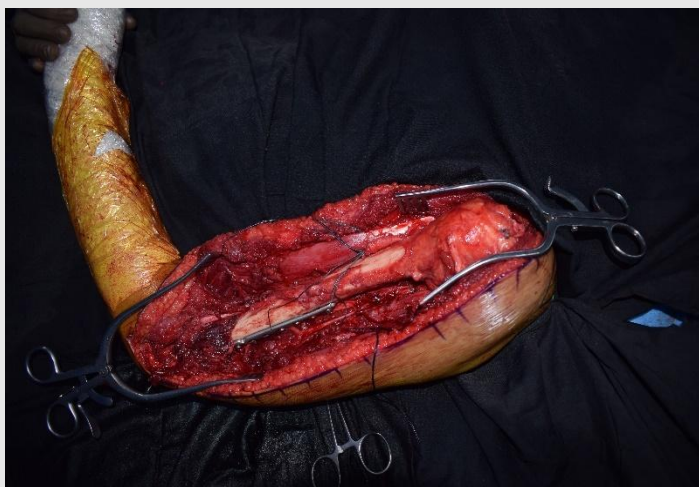
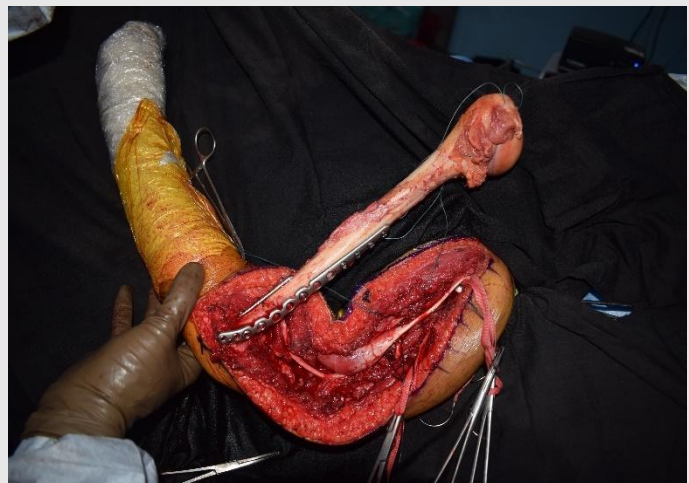
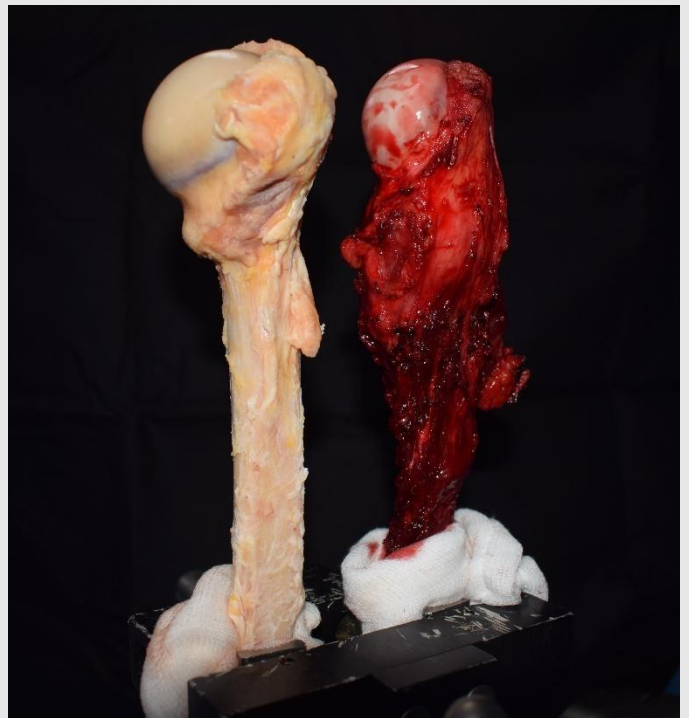
HISTOPATHOLOGY IMAGES (J Needle Biopsy) /0/2020:

Findings:

1	Conventional osteogenic sarcoma.
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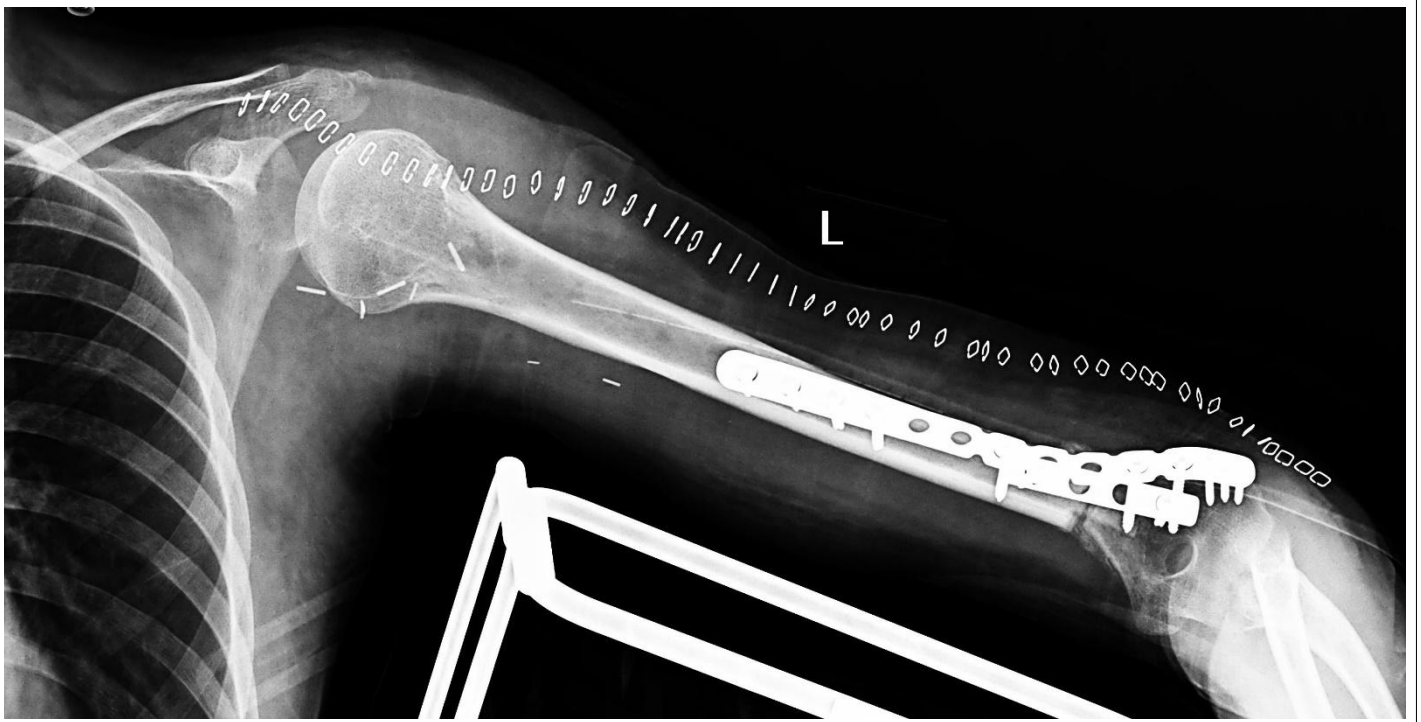
OPERATIVE IMAGES: 17/03/2021



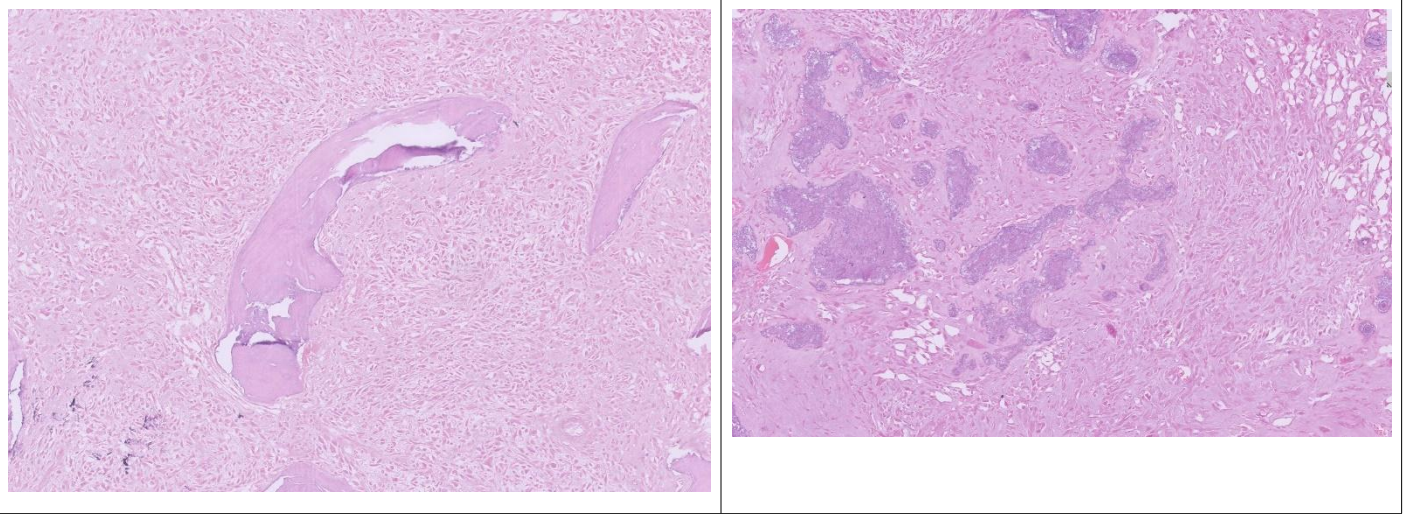




PRE-OP and POST-OP X-Ray: 16/03/2021 and 18/03/2021



HISTOPATHOLOGY IMAGES 17/03/2021:



Findings:

1	Residual viable Osteogenic sarcoma with free margins- HUVOS Grade IV
2	Pathologic stage: pT2Nx

PROPOSED RECOMMENDATION AS DISCUSSED IN TYR MULTIDISCIPLINARY SARCOMA TUMOUR BOARD:

1	Ms. Aisha, diagnosed to have osteosarcoma of the left humerus, for the same she was given the neo-adjuvant chemotherapy MAP regimen at Muscut. Later, the case was discussed in our tumor board and the decision was taken for the limb salvage with biological reconstruction as she is pretty young and in a curative intent. Hence, the reconstruction was planned for a massive allograft. She was admitted on 16/03/2021.
2	During arrival of allograft from Italy, at interim time an additional dose of chemotherapy was given to avoid the delay. Once the allograft arrived the limb salvage surgery was done with the help of fresh frozen allograft. The resection was pretty long resection just a few centimeters short from the elbow and it was reconstructed using a massive allograft and rotator cuff reconstruction. Surgical wound healed well without any post-operative problems. She was put on abduction cast with shoulder abduction spica cast for about 6 weeks and the same shall be continued for a month along with regular physiotherapy for the neuropraxia of the radial nerve. Her neuropraxia nerve is improving on discharge.

3	Discussion: She is advised to meet the primary medical oncologist (Oman) for further management. To meet Orthopaedic Surgeon -Dr.Renjith for the care of shoulder rehabilitation. She should be able to contact us anytime/If there is any emergencies through video consultation once in a month for about 5 months.
4	To review once in 3 months for every 2 years and for every 6 months for next 3 years with frequent follow up images like X-Ray/MRI/PET CT Scan as needed at her local place.

Post-operative physiotherapy & rehabilitation protocol

0 to 3 months from the date of application of Shoulder Spica Cast

- Maintain Spica cast, keep it clean and dry
- Avoid weight bearing / lifting / sleeping on the left side
- Maintain wrist drop splint, continuous passive ROM of left wrist and fingers
- Encourage active movements of wrist and fingers
- Active ROM exercises of Right upper limb, neck
- Deep breathing exercises and Chest physiotherapy

3 to 6months

- Spica cast can be removed
- Maintain continuous shoulder abduction with Ottobock Abduction Brace
- Gentle Left Shoulder Circumduction exercises, while maintaining abduction
- Gentle assisted active and passive ROM exercises of Left elbow
- Start active abduction (Deltoid and Supraspinatous) strengthening
- Shoulder shrugging, trapezius strengthening

6 to 9months

- Start active and passive full ROM of Left shoulder
- Continue Left shoulder abduction strengthening
- Pectoralis, latissimus dorsi strengthening
- Left elbow flexor strengthening with 1kg dumbbell

Post-operative imaging rehabilitation protocol

0 to 3 months

- Xray of left arm, shoulder and Elbow: AP & LAT - every month
- MRI of left arm- end of 3months from surgery
- CT Chest- end of 3months from surgery

3 to 6months

- Xray of left arm, shoulder and Elbow: AP & LAT - every alternate month
- MRI of left arm- end of 6months from surgery
- Whole body PET-CT scan- end of 6months from surgery

After 6months

- Xray of left arm, shoulder and Elbow: AP & LAT – once every 3months
- MRI of left arm- once every 6months upto 2 years, once a year thereafter for 5years
- Whole body PET-CT scan- once every 6months upto 2 years, once a year thereafter for 5years



OUR MDT TEAM MEMBERS:

NAME	DESIGNATION
Dr.Pramod Chinder	Consultant Orthopaedic Oncosurgeon
Dr Suraj H P	Orthopaedic Oncosurgeon
Dr. Nirup	Fellow-Orthopaedic Oncology
Dr. Intezar Mehdi	Paediatric Medical Oncologist
Dr. Aparna	Consultant Oncopathologist
Dr. Kunal	Consultant Oncopathologist
Dr. Imran	Consultant Oncopathologist
Dr. Kumaraswamy	Consultant Radiation Oncologist
Dr. Vikram Maiya	Consultant Radiation Oncologist
Dr. Shivakumar	Consultant Radiologist
Dr. Vijay Agarwal	Consultant Medical Oncologist

OUR TEAM MEMBERS:

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Mr. Aasim M D	Nurse Practitioner	9060178007 - 9632419696
Ms. Tejashvini	Secretary	9535832969 – 7996907996
Ms. Kavya	MSW	9632971901
Mrs. Veena	Secretary	9148663925



Prepared by: Tejashvini.

Checked by: Dr.Pramod.S.Chinder

