



THE YELLOW RIBBON

MANFRINI & PHO INSTITUTE OF SARCOMA RESEARCH

Case Brief

Patient case dossier

Name	[REDACTED]
Age	12
Gender	Male
Address	[REDACTED]
Phone Number	[REDACTED]
Diagnosis	LEFT DISTAL FEMUR OSTEOSARCOMA
Date of Diagnosis	Wednesday, May 3, 2023
Procedure	WIDE LOCAL EXCISION WITH RECONSTRUCTION USING METATECH DISTAL FEMUR MEGA PROSTHESIS(POROUS COATED)
Surgeon/s	DR. PRAMOD S CHINDER
Date of Surgery	Wednesday, September 20, 2023

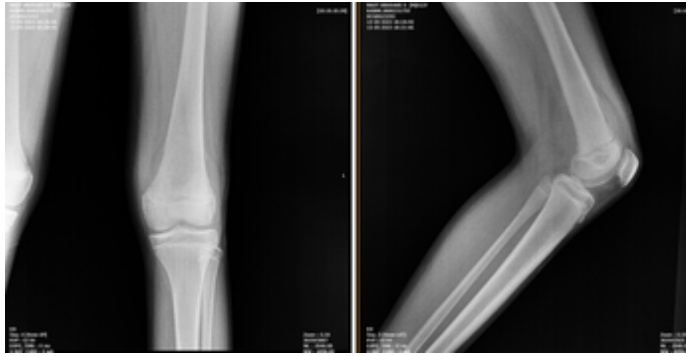
Brief summary of events

Date	Events	Findings
03-05-2023	ONSET OF PAIN AND SWELLING IN THE LEFT DISTAL THIGH	NIL
13-05-2023	PRESENTED AT HCG	SWELLING AND TENDERNESS AT LEFT DISTAL THIGH, KNEE RANGE OF MOTION RESTRICTED, NO DISTAL NEURO VASCULAR DEFICIT
14-05-2023	MRI AND PETCT	PRIMARY OSSEOUS MALIGNANCY OF THE LEFT DISTAL FEMUR NOT INVOLVING NEURO VASCULAR STRUCTURES WITH PULMONARY MICRONODULES ON PET SCAN
15-05-2023	J NEEDLE BIOPSY	NIL
22-05-2023	MDT DONE	HPE OSTEOSARCOMA BOARD DECISION TO GIVE NEO-ADJUVANT MAP REGIMEN CHEMOTHERAPY FOLLOWED BY REASSESSMENT AND SURGERY
UNTIL END OF JULY	MAP REGIMEN CHEMO	NIL
01-08-2023	REASSESSMENT WITH MRI	TUMOR MARGIN- Intramedullary (12.4CM) And Soft Tissue Extension (14.2 cm) FROM JOINT LINE
20-09-2023	SURGERY DONE	WIDE LOCAL EXCISION WITH RECONSTRUCTION USING METATECH DISTAL FEMUR MEGA PROSTHESIS(POROUS COATED)
30-09-2023	MDT DONE	HPE CHONDROBLASTIC OSTEOSARCOMA,BOARD DECISION CONTINUE ADJUVANT MAP REGIMEN CHEMOTHERAPY

File Uploads

PET-CT / CT / MRI / X-Ray / 3D / Planning Images

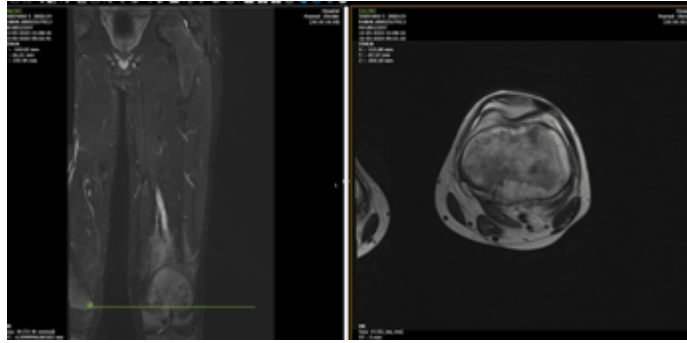
X-Ray Images



**Findings**

Sl. no.	Findings
01.	SUB-PERIOSTEAL REACTION
02.	SOFT TISSUE SHADOWS

MRI Images



IMPRESSION:

- 6.6 x 8.4 x 12.4 cm ill-defined heterogeneously enhancing lesion involving the distal metadiaphyseal region of the left femur with infiltration of physal plate and extension into the epiphysis showing aggressive periosteal reaction and associated soft tissue component as described above - suggestive of neoplastic etiology, likely Osteosarcoma.
- Mild joint effusion with mild synovial thickening.
- Few subcentimeter prominent popliteal lymphnodes.

Dr. Jimmy Mary Mathew
Fellow in Breast & Onco Imaging

Dr. Avinash Kesari, DMRD, DNB, FRCR
Consultant Radiologist

PET-CT Images

Back ground uptake in liver is 2.4

Physiological concentration is seen in the heart, gut, brain, kidneys and bladder.

Increased FDG concentration is seen in the following regions (SUV as per Body Wt)

- Lesion involving the distal metadiaphysis of left femur with extensions SUV: 12.8

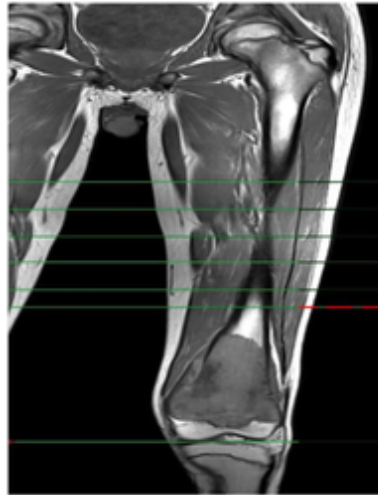
IMPRESSION: PETCT:

- 8.3 x 6.5 x 10.1 cm metabolically active permeative osteolytic / sclerotic lesion involving the distal metadiaphysis of left femur with extension across physal plate into the epiphysis and aggressive periosteal reaction with extrasosseous soft tissue as described above - osteosarcoma.
- Pulmonary micro-nodule along the right major fissure. Recommend direct comparison with prior studies / follow up to confirm stability.
- Other CT findings as described above.

Dr. K.G. Kallur
Consultant Nuclear Medicine

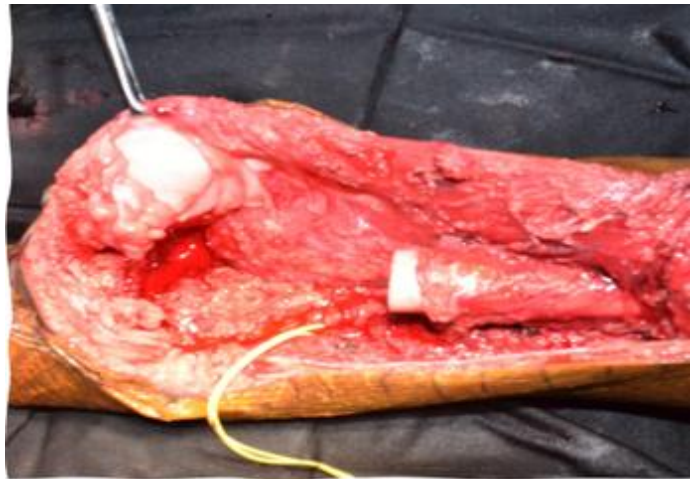
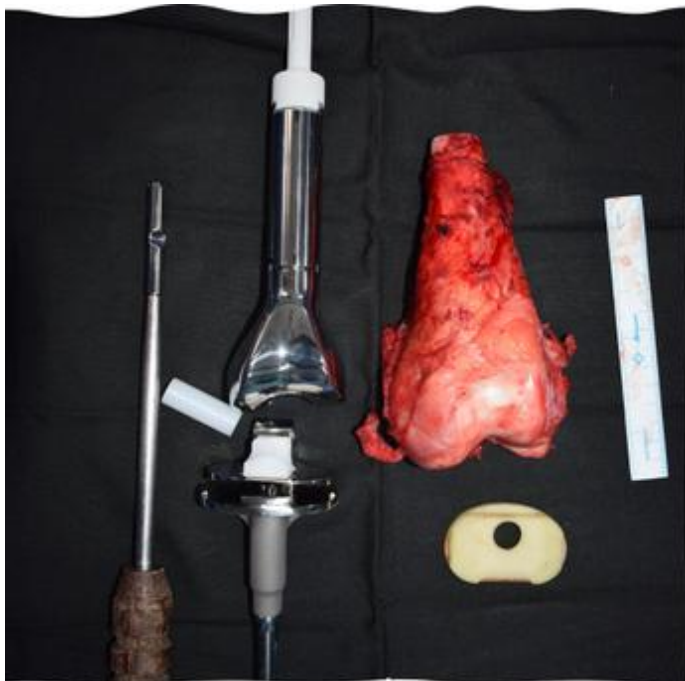
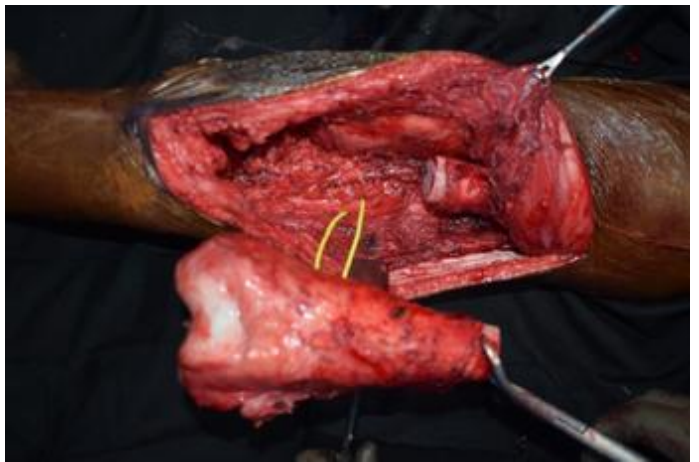
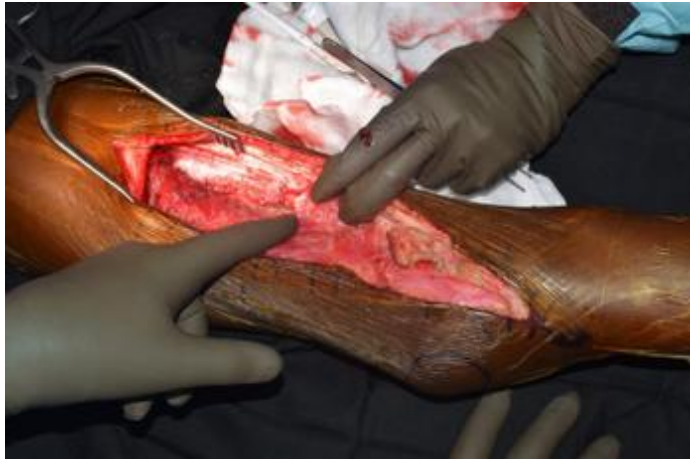
Dr. Mallesh A
Consultant Radiologist

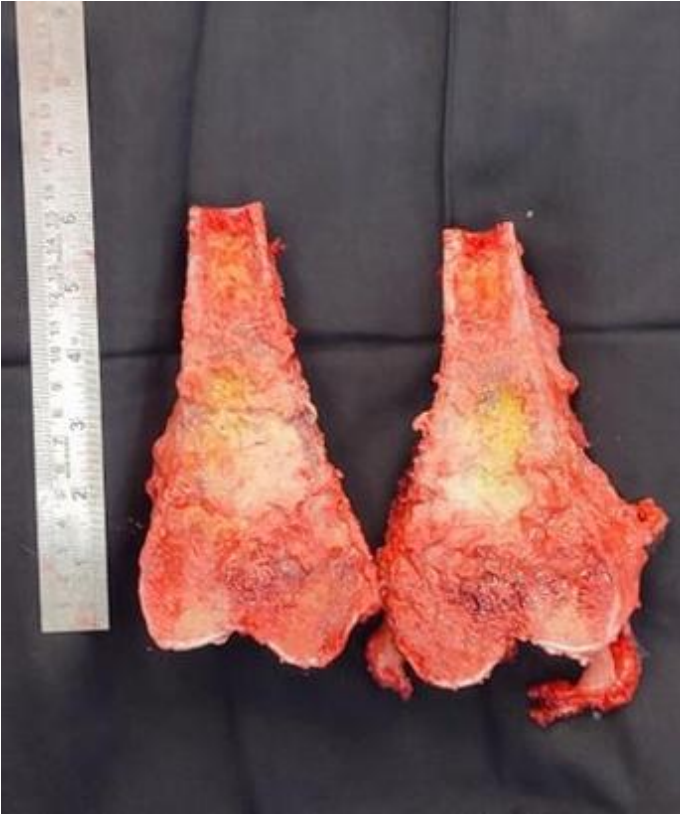
3D Images



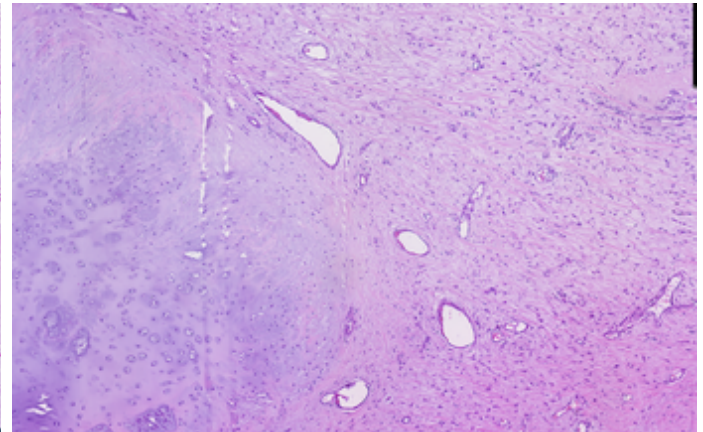
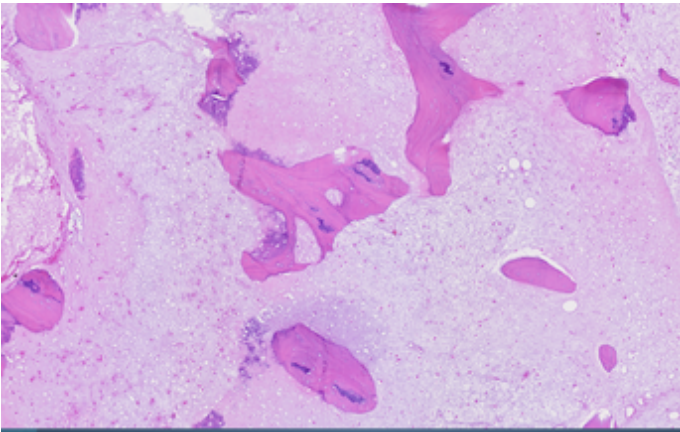
INNER DIAMETER	OUTER DIAMETER
12.1MM	22.9MM
11.7MM	22.7MM
12.0MM	22.3MM
12.7MM	24.7MM
12.4MM	25.3MM
Tumor extent	
Lateral Knee Joint	

Operative Images





Post-Op Images (MRI/CT/PETCT/X-ray/Histopathology)



Microscopic description:	Frozen section diagnosis: (Dr. Prem & Dr. Shaikh dated 20/09/2023) Section shows fragments of bony trabeculae and scattered marrow elements. No evidence of malignancy seen.
	Frozen section diagnosis confirmed

HISTOPATHOLOGY REPORT Extra Large Specimen

1. Left distal femur:
Tumor Histologic Type: Residual viable Chondroblastic Osteosarcoma
Mitotic Rate: 6-7 /10 high-power fields (HPF) (Score 2)
Necrosis (macroscopic or microscopic): Present - 60% (Score 2) (HUVOS Grade 2).
Histologic Grade : NA
Margins:
 Soft tissue Margins: Uninvolved by sarcoma
 Skin Margins: Uninvolved by sarcoma
 Bone resection margins: Uninvolved by sarcoma
 Neurovascular pedicle: Cannot be assessed.
 Lymphovascular invasion: Not identified
Additional Pathologic Findings: Mild mononuclear inflammatory cell infiltration (Cold tumor)
Ancillary Studies : Recommend PDL1 and Genomics
Pre-resection Treatment: Chemotherapy performed
Treatment Effect: Present

Regional Lymph Nodes: Not submitted

2. Left distal femur stump:
 Free of tumor

Features are of Residual viable Chondroblastic Osteosarcoma, HUVOS Grade 2, with free margins
Pathologic stage (8th AJCC Staging system): ypT1aNx



Physiotherapy Protocol

STATIC QUADRICEPS STRENGTHENING EXERCISE, HAMSTRING STRENGTHENING EXERCISES, LONG KNEE BRACE APPLICATION, WALKER ASSISTED MOBILISATION

MDT Members

Name	Department
DR. PRAMOD S CHINDER	MSK ONCOLOGY
DR. ABRAR	MSK ONCOLOGY
DR. NITIN	MSK ONCOLOGY
DR. SHIVAKUMAR	RADIOLOGIST
DR. SUMA	PEDIARITIC ONCOLOGIST
DR. VEENA	ONCO PATHOLOGIST
DR. PREMITHA	RADIATON ONCOLOGIST

Dr. Pramod Chinder
Orthopaedic Oncosurgeon