

# **CASE BRIEF**

Name:

Age: 52 years, Female.

Diagnosis: Metastatic adenocarcinoma of left pelvis, post op, post radiation.

Date of Diagnosis: 17/02/2022

Surgery/Surgeons: Dr. Pramod S Chinder and Dr. Suraj HP

Date of Surgery: 11/05/2022

### **BRIEF SUMMARY OF THE EVENTS:**

DATE	EVENTS	FINDINGS
2021	C/O Pain, radiating to back	Left pelvic area.
Jan 2022	Severe pain	Difficulty in ambulation.
12 <sup>th</sup> Feb 2022	PET CT Scan	Lytic lesion arising from left ischium-
17 <sup>th</sup> Feb 2022	CT Guided biopsy	Evidence of metastatic adenocarcinoma.
22 <sup>nd</sup> Feb 2022	MRI	Likely of neoplastic etiology.

### MDT conclusion:

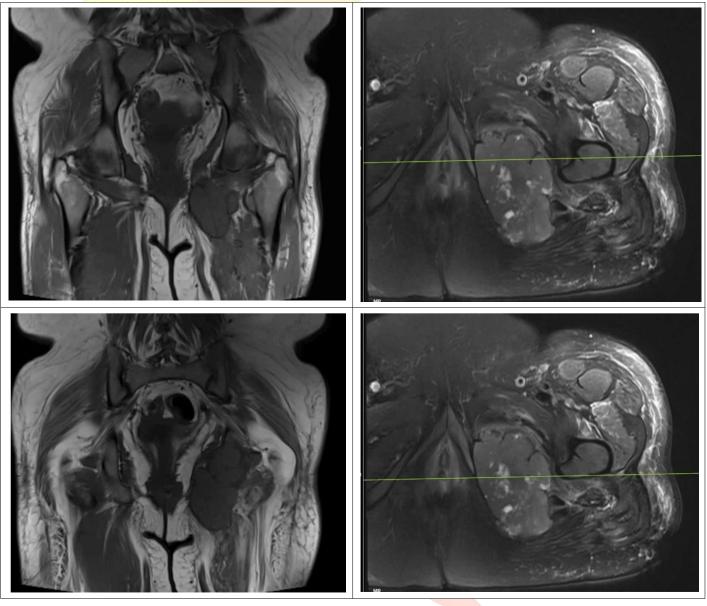
In view of origin of the adenocarcinoma was not conclusive, MDT was conducted and decision was taken to give neoadjuvant radiation therapy followed by enbloc excision of the tumor

08 <sup>th</sup> Mar 2022-13 <sup>th</sup> Apr	Radiation	Dose of 50.4Gy in 28 fractions over a period of 5 ½ weeks.	
		WCCK3.	
2022			
05 <sup>th</sup> Apr 2022	MRI	Relatively stable heterogeneously enhancing lobulated mass lesion.	
10 <sup>th</sup> May 2022	Pre op embolization and microwave tumor ablation		
11 <sup>th</sup> May 2022	Surgery Enbloc tumor excision and reconstruction		
21st July 2022	Surgery Meshplasty		

## X-RAY IMAGES: 05/02/2022



### MRI IMAGES: 22/02/2022

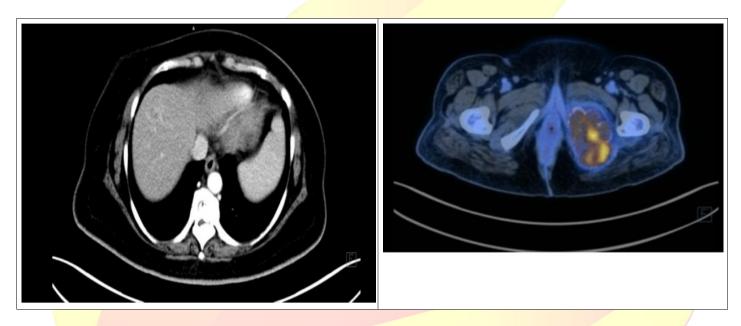


Any unauthorized copying, distribution, or use of this document or any portion thereof may be a violation of applicable laws and is strictly prohibited.



9.5 x 7.1 x 5.1 cm large expansile T2/STIR hyperintense heterogeneously enhancing lesion arising from left ischium, extending into inferior pubic ramus showing patchy areas of diffusion restriction with extra-osseous soft tissue component causing infiltration of sciatic nerve and proximal fibers of adductor magnus; likely of neoplastic etiology.

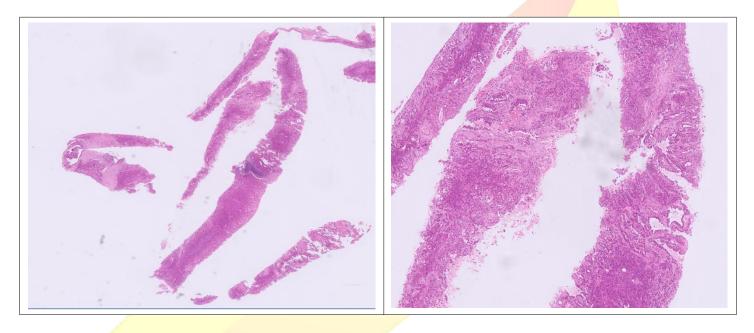
## PET CT IMAGES: 12/02/2022



## Findings:

- 9.4 x 7.1 x 5.1 cm metabolically active expansile lytic lesion arising from the left ischium extending into the inferior pubic ramus with evidence of cortical breach, extraosseous soft tissue and internal chondroid matrix calcifications- of neoplastic etiology, likely representing primary chondrosarcoma.
   Cirrhosis of liver with portal hypertension and moderate splenomegaly.
- 2.0 x 1.6 cm arterially enhancing lesion in segment VIII of liver, metabolically hypoactive-likely representing a hemangioma over primary neoplastic lesion (hepatocellular carcinoma)

## HISTOPATHOLOGY IMAGES (CT Guided Biopsy) 17/02/2022:



## **Findings:**

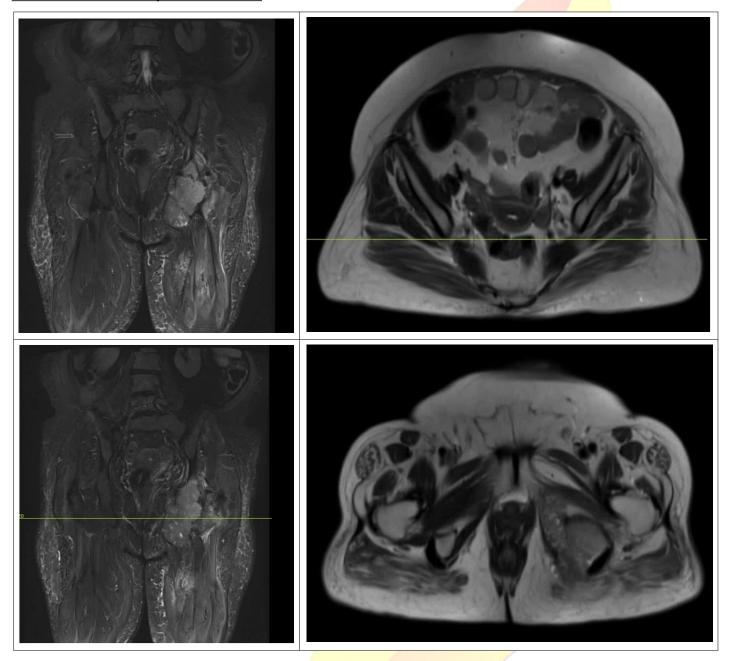
1	HPE: Features are suggestive of metastatic adenocarcinoma.
2	IHC: Tumor cells are positive for CK7, p40 (focal weak) and are Negative for CK20, CD56,
	GATA3, MUC5AC and p63. Negative for TTF1, PAX8 and S100.  Features are of poorly differentiated adenocarcinoma.
	reatures are or poorly differentiated adenocarcinoma.

### **RADIATION SUMMARY:**

### Treatment Period: 08/03/2022 to 13/04/2022

Course of treatment: Received external radiotherapy on LINAC by VMAT planning to the PET avid contrast enhancing lesion in ischio pubic region with 1cm margin to a dose of 50.4Gy in 28 fractions over a period of  $5 \frac{1}{2}$  weeks.

# MRI IMAGES (Pre-Op): 05/04/2022



# Findings:

1	Relatively stable heterogeneously enhancing lobulated mass lesion arising from left ischium, extending into inferior pubic ramus with extra-osseous soft tissue.
2	Internal development of focal enhancing lesion involving the left proximal femoral shaft- of concern for metastasis.
3	Chronic liver parenchymal disease.
4	2.1 x 1.5 cm T2 hypointense progressively enhancing nodule in segment VIII of liver, atypical

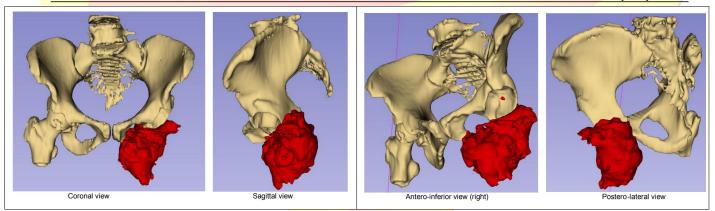


	hemangioma v/s dysplastic/neoplastic nodule. The lesion remains relatively stable in size	
	compared to prior PET scan.	
5	Splenomegaly.	

- 1. PRE-OP TUMOR EMBOLIZATION: 10/05/2022
- 2. MICROWAVE TUMOR ABLATION PROXIMAL FEMORAL METASTASIS:10/05/2022

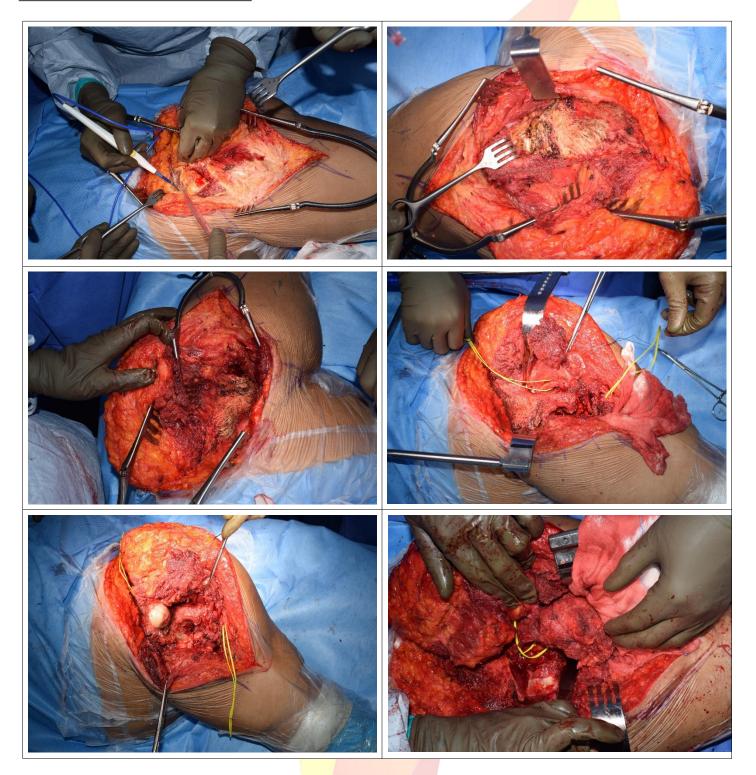


## 3. PELVIC RESECTION WITH RECONSTRUCTION USING 3D PRINTED IMPLANTS:11/05/2022



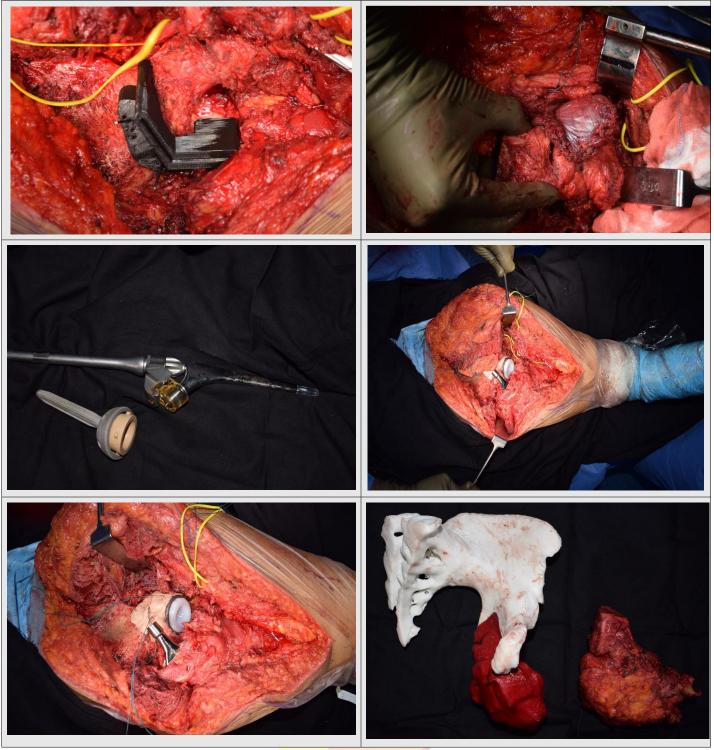


# **OPERATIVE IMAGES: 11/05/2022**













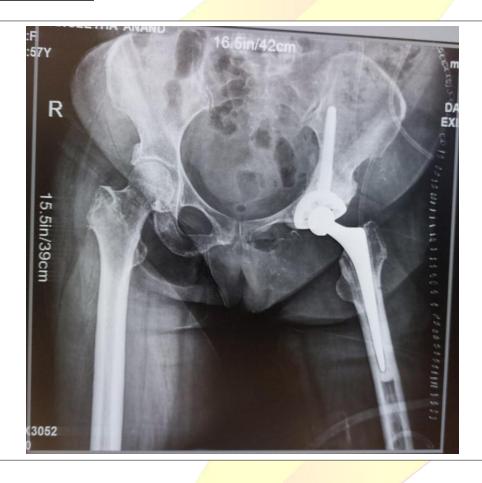


On 11.05.2022, she underwent left sided type 2 pelvic resection + reconstruction with custom made implants. Intraoperatively, sciatic nerve was preserved, femoral neck cut was taken and tumor was dissected out and resection was carried out with the help of 3D printed jigs.

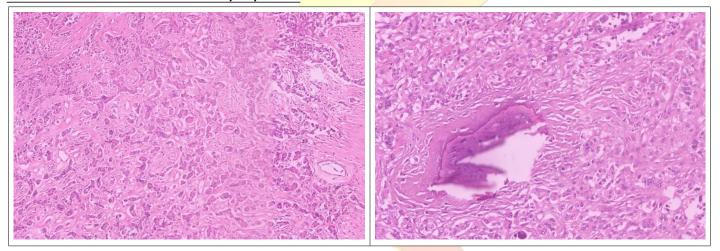


2	Central jig was placed over the acetabulum to seat the stem of the custom-made
	acetabular implant. Hip reconstruction was carried out with the stryker hip replacement
	system.
3	Intraoperatively hip was stable in all ROM. The hip joint was augmented with meshplasty.

# POST-OP X-Ray: 12/05/2022



# **HISTOPATHOLOGY IMAGES: 11/05/2022:**





1	Features are of Metastatic Adenocarcinoma.
2	No Necrosis seen; margins are free of tumor.

## MESHPLASTY: 21/07/2022





1	She was operated with resection and prosthetic reconstruction for left pelvis lesion which was diagnosed as carcinoma of unknown origin. On follow-up, she presented with complaints of pain in the left groin and inability to move the hip. She had presented with similar history July 1st week when she was found to have dislocated hip and relocation was done. At that point of time, hip was stable in ROM and she was placed in an abduction brace.
2	An x-ray taken at the local centre revealed a repeat episode of hip dislocation and relocation was attempted, but hip was unstable and re-dislocating. Hence, she was planned for meshplasty after the PET Scan.
3	She underwent left hip arthrotomy. Head of the implant was found to be located anteriorly and medially. Soft tissue release was carried out and head was located.
4	The joint was stable in all ROM. Implant version was rechecked and was found to be satisfactory. Mesh augmentation was done to the joint capsule, and meticulous abductor mechanism closure was done. Sutures anchors were put in greater trochanter for reattachment of gluteus mechanism.
5	In a located status, she was put on hip abduction brace. Post procedure x-ray showed a located hip, and fluro was done to do assess ROM and stability during ROM which was found to be satisfactory.

# PROPOSED RECOMMENDATION AS DISCUSSED IN TYR MULTIDISCIPLINARY SARCOMA TUMOUR BOARD:

1	Post operative PET-CT scan shows no evidence of local or distant disease. However, considering the size of the lesion, patient is advised close follow-up with MRI every 3months and whole-body PET-CT once every 6months for the first 2years.
2	Patient is also advised Endoscopy and Colonoscopy to rule out primary in the upper and lower GI tract.
3	With respect to stability of the hip joint, Fluroscopy performed showed stable hip in functional range of motion. Only with axial traction with hip in flexion, minimal distraction was evidenced. Hence, patient has been advised minimal weight bearing and to avoid

	extensive flexion at the hip joint.
	X-ray is advised once every 6weeks.
	Weight bearing to be gradually increased by 20% every month.
	To continue walker support during ambulation till further advice.
4	To review once in 3 months for every 2 years and for every 6 months for next 3 years.

## **OUR MDT TEAM MEMBERS:**

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



## **OUR TEAM MEMBERS:**

NAME	DESIGNATION	CONTACT NUMBER
Mr. Roofus Mohan	Nurse Practitioner	8197859696
Mr. Aasim Mohammed	Nurse Practitioner	9060178007 - <b>9632419696</b>
Ms. Tejashvini Anchan	Secretary	9535832969 – <b>7996907996</b>
Mrs. Kavya	MSW	9632971901
Mrs. Veena	Coordinator	9148663925

Prepared by: Tejashvini.

Checked by: Dr.Pramod.S.Chinder