



2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

CASE PRESENTATION

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HOD DEPT OF RADIDIAGNOSIS

JJMMC, DAVANGERE

CASE PRESENTATION

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PRESENTER: Dr. Sanjay, PG Resident

Clinical history :

A 15 year old came with chief complaints of swelling over left hand between the 4th and 5th digits present since birth

The swelling is gradually increasing in size and associated with occasional pain,

O/E swelling of 10x6 cm noted in the 4th web of left hand, which is compressible, non pulsatile

Overlying bluish discoloration of skin with dilated vessels noted over the swelling. Not associated with tenderness/increase in temperature

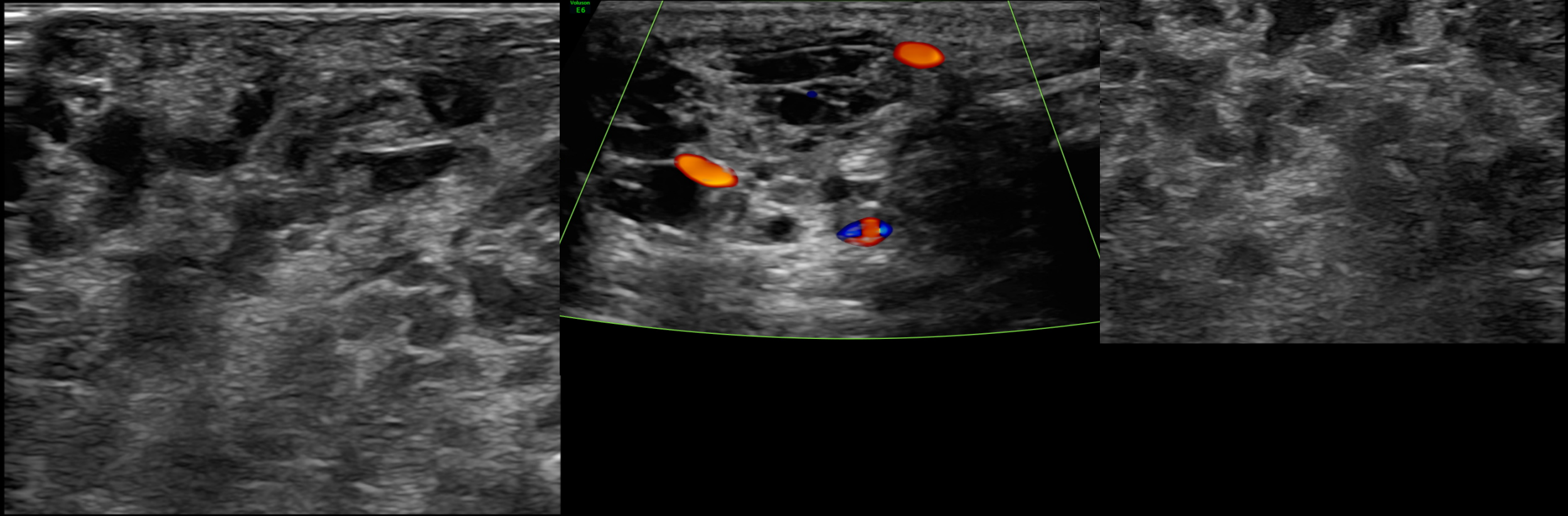


Radiograph Left hand



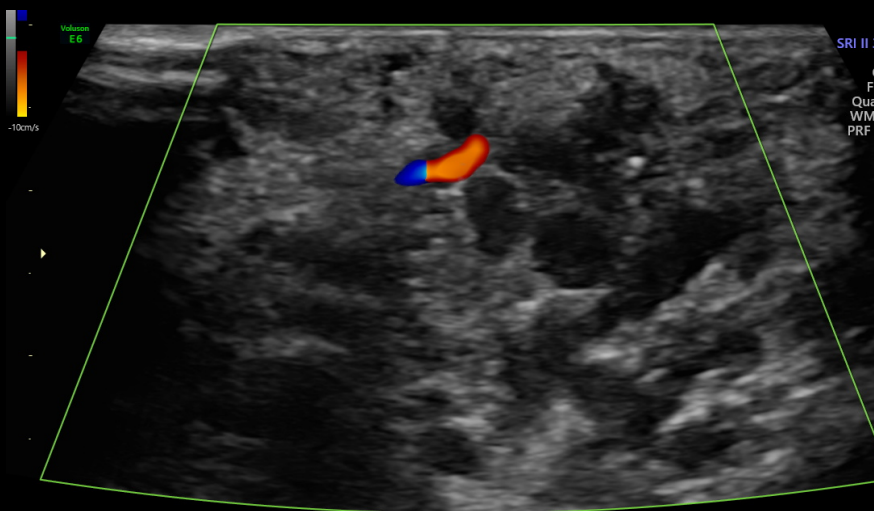
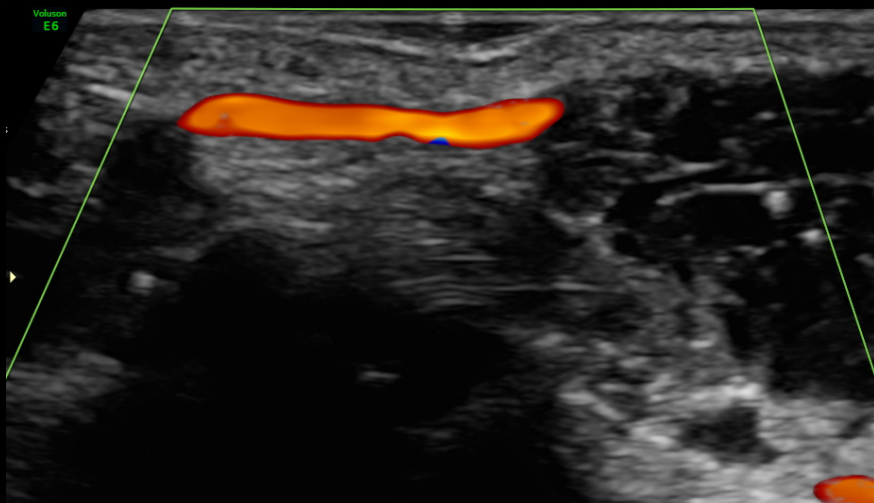
Evidence of lobulated well defined soft tissue density lesion noted between the 4th and 5th phalanges. This lesion is causing splaying of the metacarpals and phalanges with scalloping of adjacent phalanges. Multiple varying sized radioopaque densities noted within the lesion – S/o phleboliths

On preliminary ultrasound correlatio

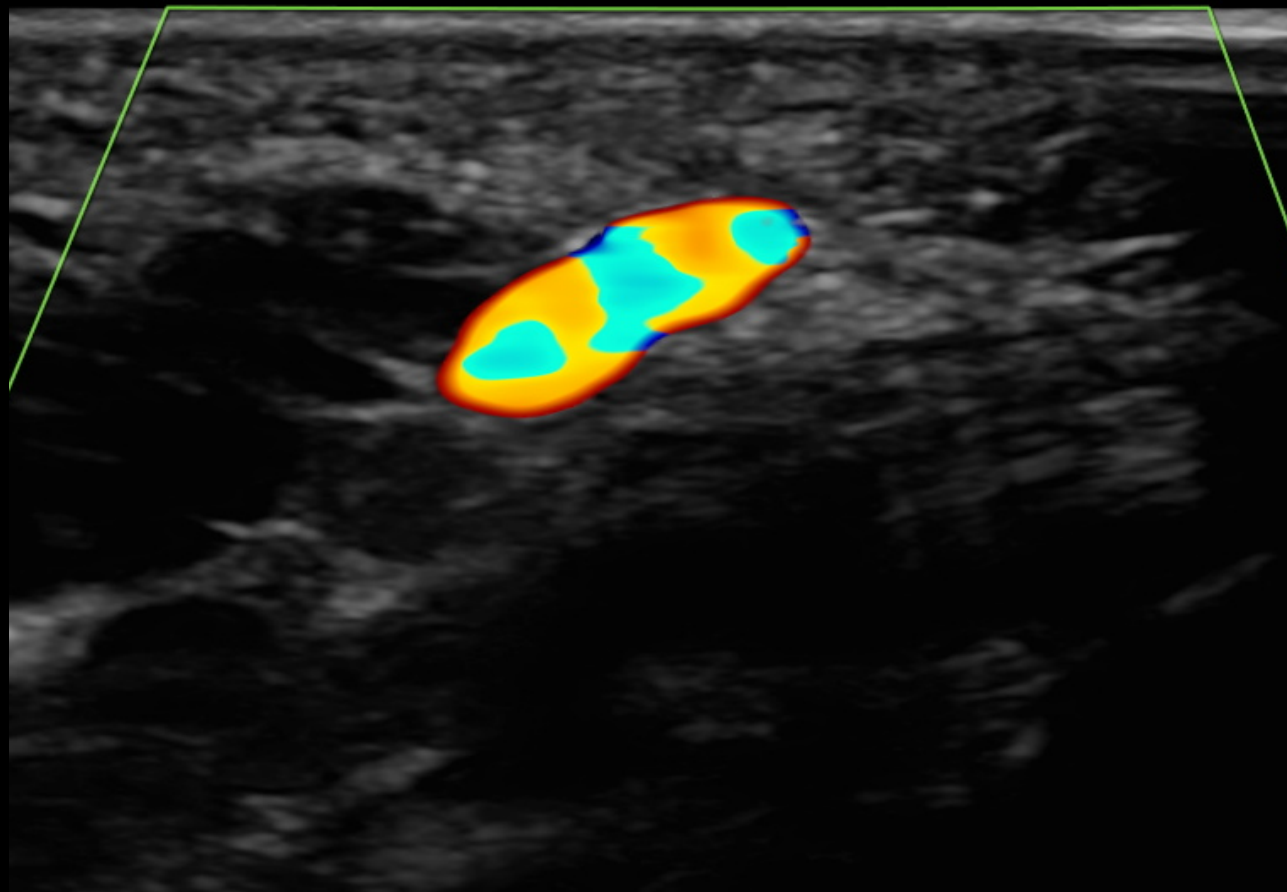


On ultrasound there is evidence of a well-defined heterogeneous iso-hypoechoic lesion involving the subcutaneous and muscular plane with multiple interspersed anechoic cystic spaces which show minimal vascularity on Doppler study – Likely vascular channels

FEEDING VS LAT

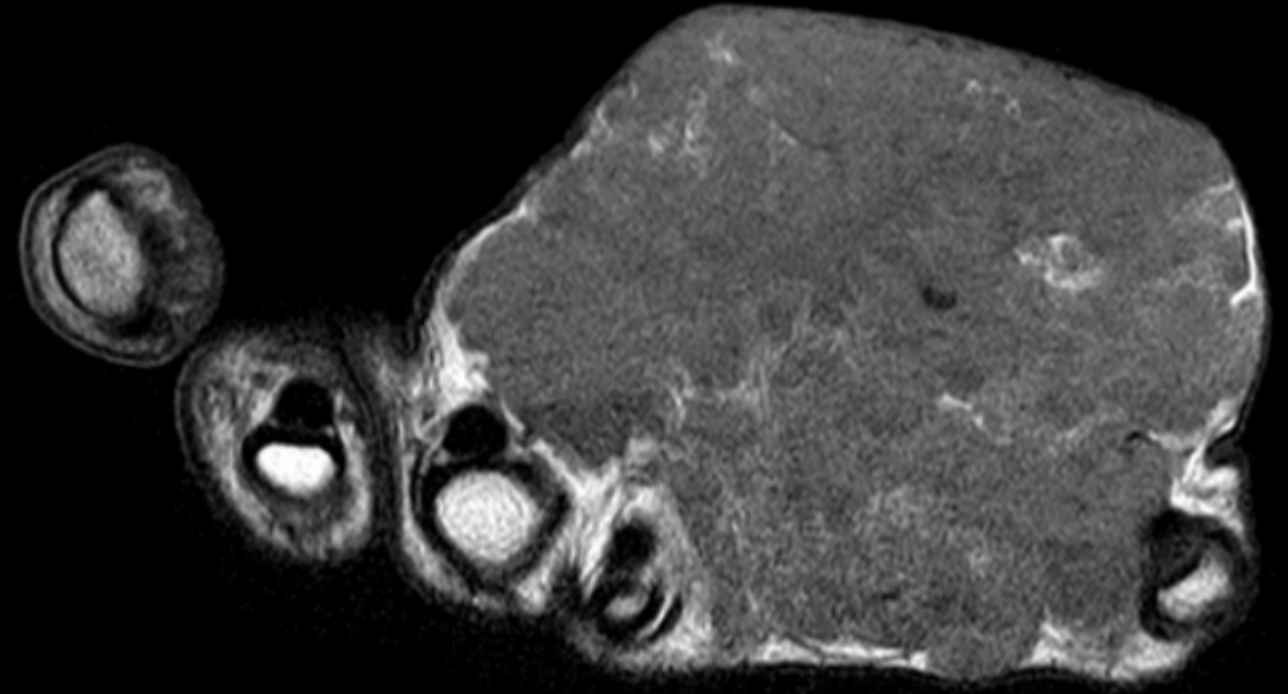


FEEDING ARTERY



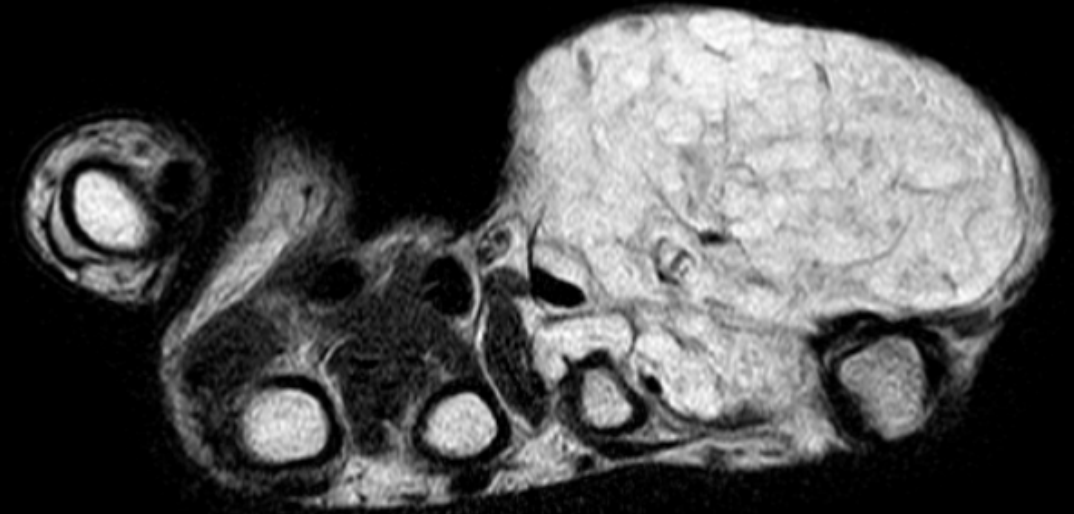
Feeding artery noted reaching into the lesion with minimal vascularity noted within the lesion

MRI T1 CORONAL and AXIAL
plane



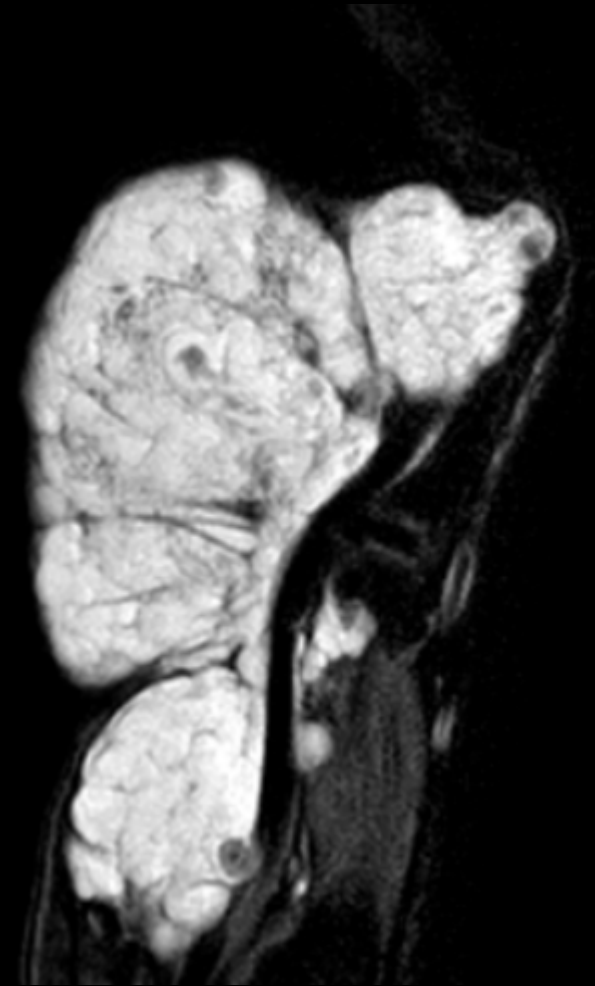
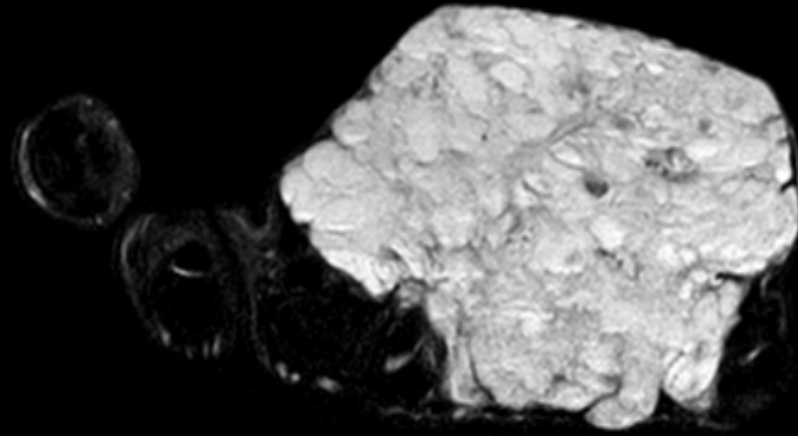
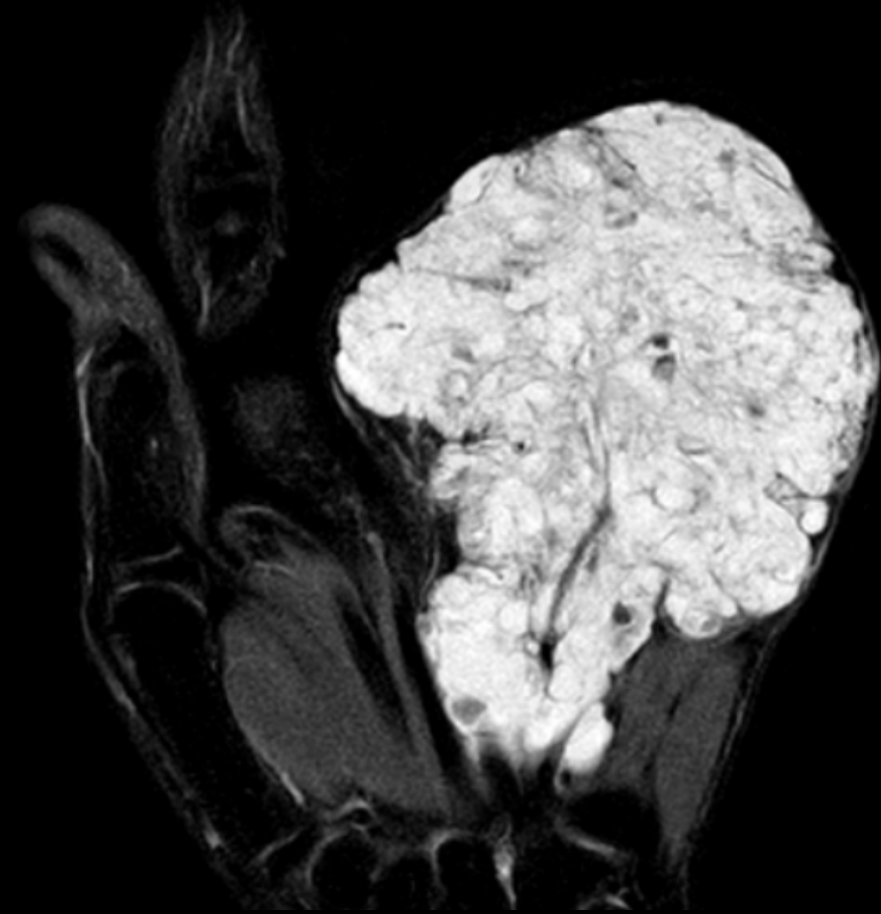
There is a well defined large lobulated heterogenous predominantly hypoechoic lesion compared to the skeletal muscle noted in hypothenar eminence (medial aspect) in palmar surface of left hand in the subcutaneous plane, inter and intramuscular plane.

T2 Weighted images



T2 heterogeneously hyperintense with multiple flow voids noted within. The lesion is seen encasing flexor tendons of 4th and 5th digits, splaying of 4th and 5th metacarpals and phalanges. Linear flow void noted within the lesion – Likely feeding artery

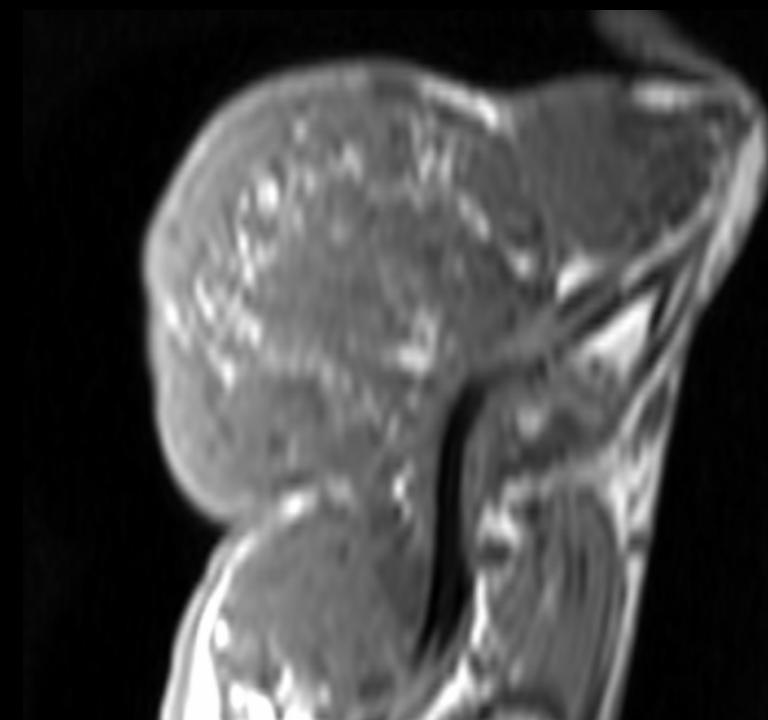
STIR AXIAL,CORONAL AND SAGGITAL



Heterogeneously hyperintense lesion with multiple flow voids noted within , On sagittal plane a linear flow void noted in the antero-medial aspect encased by the lesion –

Feeding ulnar artery

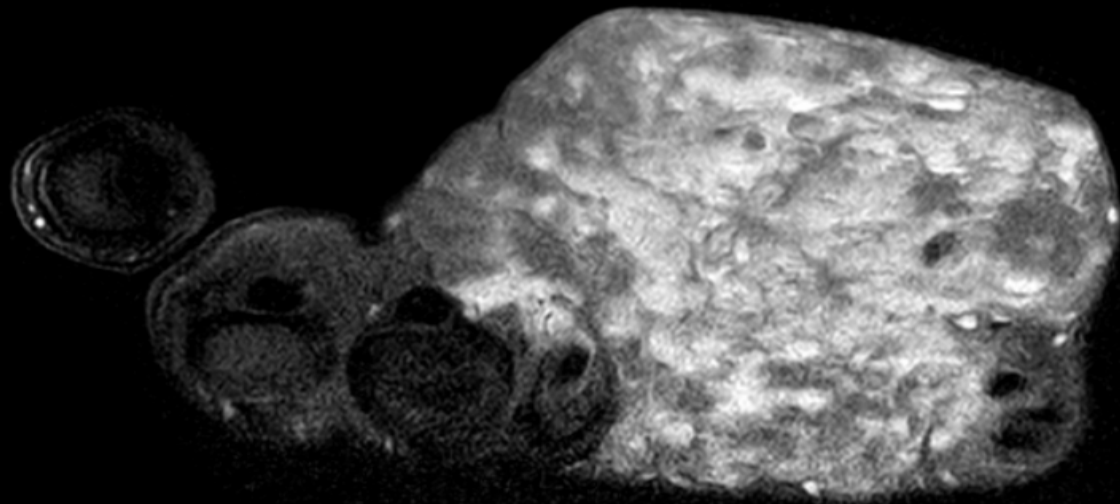
FFE and MIP MRA



feeding artery noted on MIP MRA
encased by the lesion
On ffe multiple foci of blooming noted
– S /o phleboliths

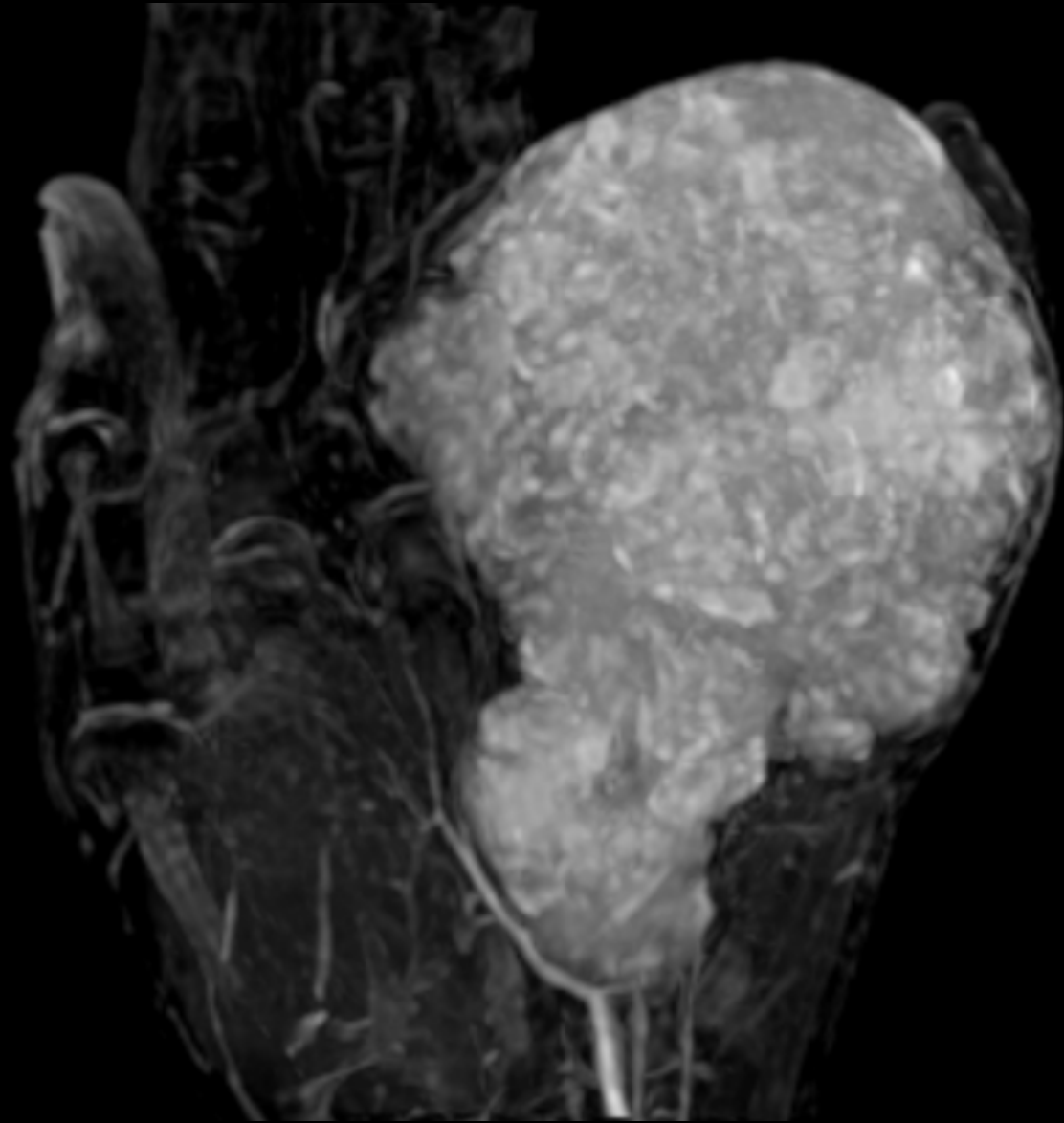
Post contrast

post contrast the lesion shows **gradual patchy enhancement**



On post contrast

In this post contrast MIP image
avid heterogenous
enhancement of the lesion is
seen

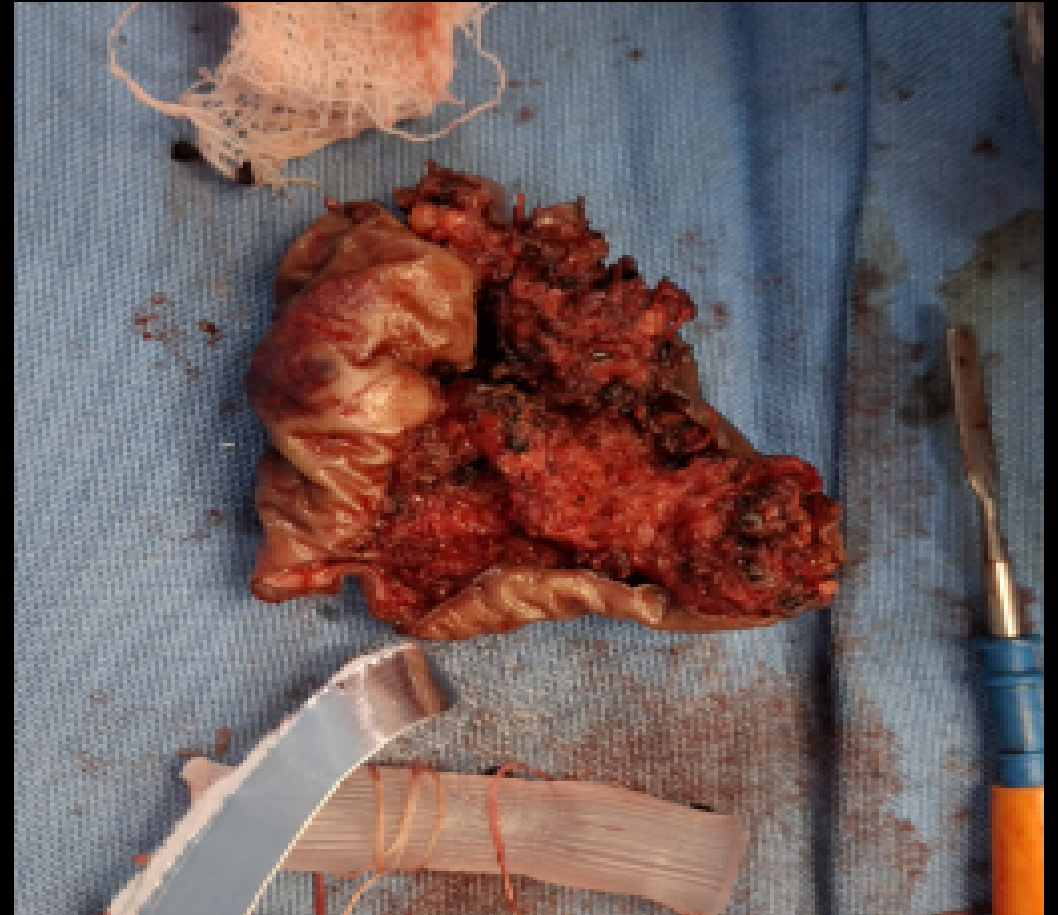
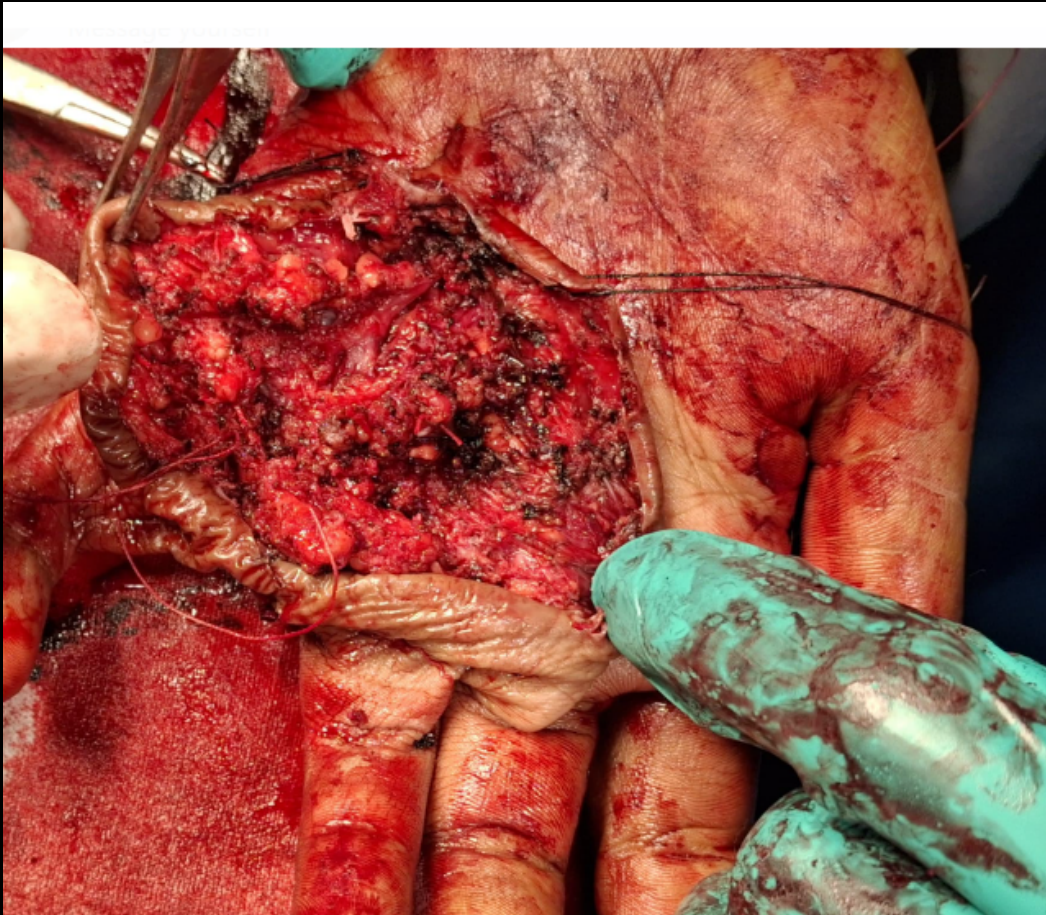


Diagnosis

- Well-defined, large, lobulated in hypothenar eminence (medial aspect) in palmar surface of right hand in the subcutaneous plane, inter and intramuscular plane, encasing flexor tendons of 4th and 5th digits and splaying of 4th and 5th metacarpals and phalanges. Feeding artery and draining veins noted with gradual patchy enhancement.
- ➔ *Features suggestive of Vascular malformation of left hand*

Follow up

A lobulated hypervascular lesion was seen with multiple feeder vessels . An elliptical incision was made and the lesion was excised and haemostasis was achieved



- Thank you