Journal Homepage: - www.journalijar.com
INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)
Article DOI: 10.21474/IJAR01/9913
DOI URL: http://dx.doi.org/10.21474/IJAR01/9913
ISSN NO. 2320-5407

RESEARCH ARTICLE

RARE PRSENTATION OF GIANT CELL TUMOR AT UNUSUAL SITES.

Kommanagunta Muni Muralidhar Rao and K.Usha Sree.

Manuscript Info

Manuscript History
Received: 14 August 2019
Final Accepted: 16 September 2019
Published: October 2019

Abstract

Introduction:-

Case 1 :

A female Patient by name shaik ambreen aged 27 years came to orthopaedics OPD with the chief complaints of pain and swelling at the right wrist since 2 months. Pain started insidiously,dull aching type,localised,continous,aggravated by movements at the Wrist joint, relieved by rest and medication. The swelling is slow growing in nature.

Local Symptoms

Patient c/o swelling followed by pain and decreased range of movements at the wrist joint.

No constitutional symptoms.

Patient is moderately built and nourished.

On examination

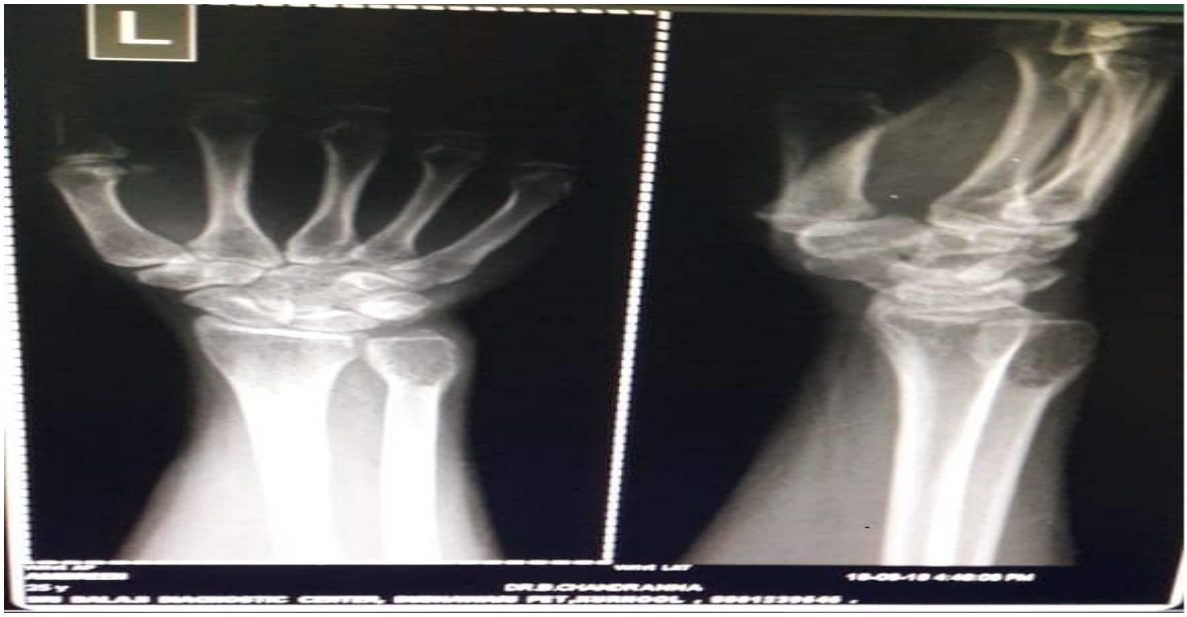
Pallor-present

1. Other general examination findings are normal.
2. A swelling of 2X3 cm over the dorsal aspect of the right wrist.
3. Overlying skin is streched and shiny.
4. Swelling is immobile. Local rise of temperature is present.
5. Tenderness is present.
6. Swelling is firm in consistency.

No egg shell crackling.

Corresponding Author:-Kommanagunta Muni Muralidhar Rao.

S.No	TEST	RESULTS	NORMAL VALUES
1	HAEMOGLOBIN	8.6 gms /dl	Men : 13-18 gms/dl Women : 12 - 14 gms.dl
2.	T.W.B.C.	6,000 /cmm	4000 -11,000/cmm
3.	DIFFERENTIAL COUNT		
	POLYMORPHS	60 %	50 - 70 %
	LYMPHOCYTES	35 %	25-40%
	EOSINOPHILS	03 %	1 - 4 %
	MONOCYTES	02 %	3 - 8%
	BASOPHILS	00 %	0 - 1%
4.	E.S.R.	mm/hr	Men : 0 - 7 mm/hr Women : 0 -15 mm/hr
5.	ABSOLUTE EOSINOPHIL COUNT	/cmm	40 - 440/cmm
6.	T.R.B.C.	4.6 /millions / cmm	4.5 - 5.5 millions / cmm
7.	P.C.V.	%	Male : 40 - 54% Female : 37 - 47%
8.	PLATELETS	2,03,000 /cmm	2,00,000-3,00,000 / cmm
9.	M.C.V.	FL	86 ± FL
10	M.C.H.	Pg	27-32 Pg
11	M.C.H.C.	%	3 2 - 36%
12.	BLEEDING TIME	2 : 00	1-3 Minutes.
13.	CLOTTING TIME	4 : 00	1-6 minutes
14	RETICULOCYTE COUNT	%	0.5 - 1 %
15	BLOOD GROUP & Rh		
16	MALARIAL PARASITE		
17	MICROFILARIA		
18	L.E.CELL		



Epiphyseo-metaphyseal in location.

Expansible lesion at lower end of right ulna.

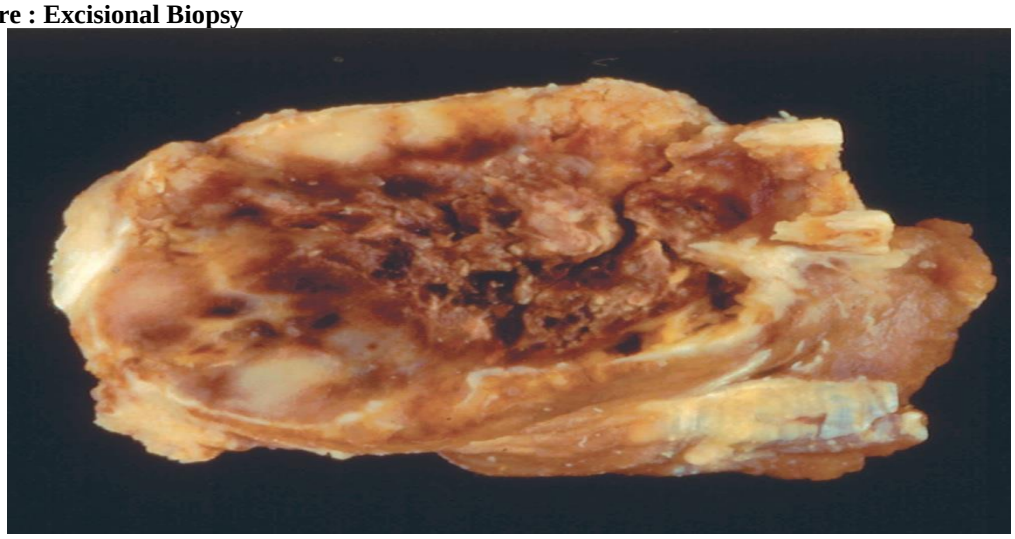
Eccentrically situated.

Thin sepate are visible

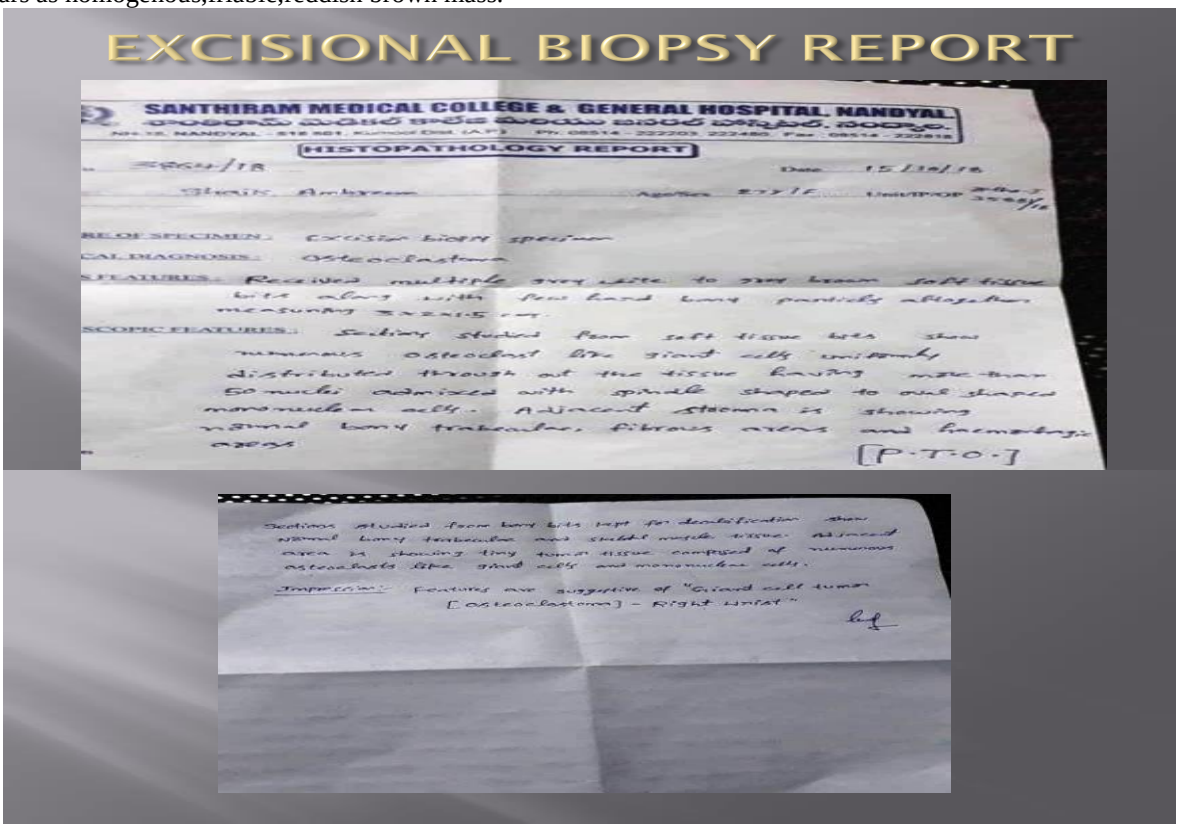
No periosteal reaction and calcification.

Provisional diagnosis is Giant cell tumour of lower end of left ulna.

Plan of care : Excisional Biopsy



Appears as homogenous,friable,reddish brown mass.



Case 2:

A male patient by name pulliah aged 37 years came to orthopaedics OPD with the chief complaints of pain and swelling at the left index finger since 3 months.

Pain started insidiously,dull aching type,localised,continous,aggravated by movements at the left index finger, relieved by rest and medication The swelling is slow growing in nature.

Local Symptoms
Patient c/o swelling followed by pain and decreased range of movements at the proximal interphalangeal joint.

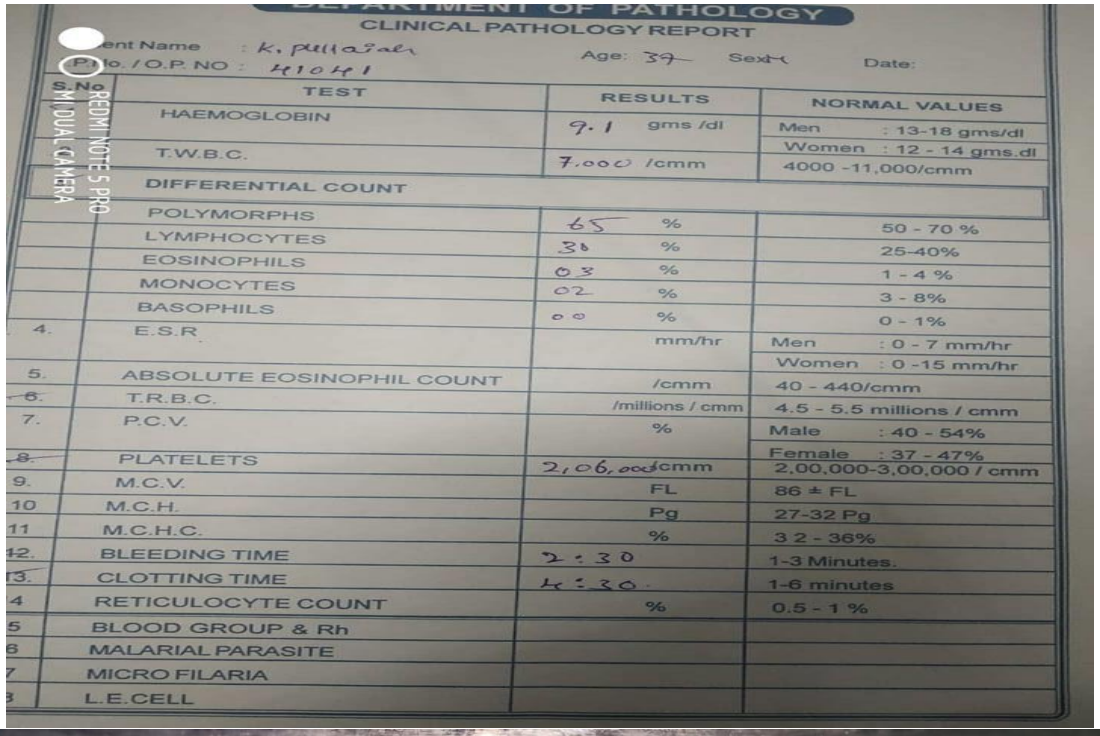
No constitutional symptoms.
Patient is moderately built and nourished.

On examination
All general examination findings are normal.

A swelling of 1X2 cm over the dorsal aspect of the middle phalanx of left index finger.

Swelling is immobile,fusiform and enlarged in all directions. Local rise of temperature is present.
Tenderness is present.

Swelling is firm in consistency.



DEPARTMENT OF PATHOLOGY

CLINICAL PATHOLOGY REPORT

ent Name : K. Pullaiah Age: 39 Sex: M Date:

lo. / O.P. NO : 41041

S.No	TEST	RESULTS	NORMAL VALUES
	HAEMOGLOBIN	9.1 gms /dl	Men : 13-18 gms/dl
			Women : 12 - 14 gms.dl
	T.W.B.C.	7,000 /cmm	4000 -11,000/cmm
	DIFFERENTIAL COUNT		
	POLYMORPHS	65 %	50 - 70 %
	LYMPHOCYTES	30 %	25-40%
	EOSINOPHILS	03 %	1 - 4 %
	MONOCYTES	02 %	3 - 8%
	BASOPHILS	00 %	0 - 1%
4.	E.S.R.	mm/hr	Men : 0 - 7 mm/hr
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5.	ABSOLUTE EOSINOPHIL COUNT	/cmm	40 - 440/cmm
6.	T.R.B.C.	/millions / cmm	4.5 - 5.5 millions / cmm
7.	P.C.V.	%	Male : 40 - 54%
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12.	BLEEDING TIME	2 : 30	1-3 Minutes.
13.	CLOTTING TIME	4 : 30	1-6 minutes
14	RETICULOCYTE COUNT	%	0.5 - 1 %
15	BLOOD GROUP & Rh		
16	MALARIAL PARASITE		
17	MICRO FILARIA		
18	L.E.CELL		

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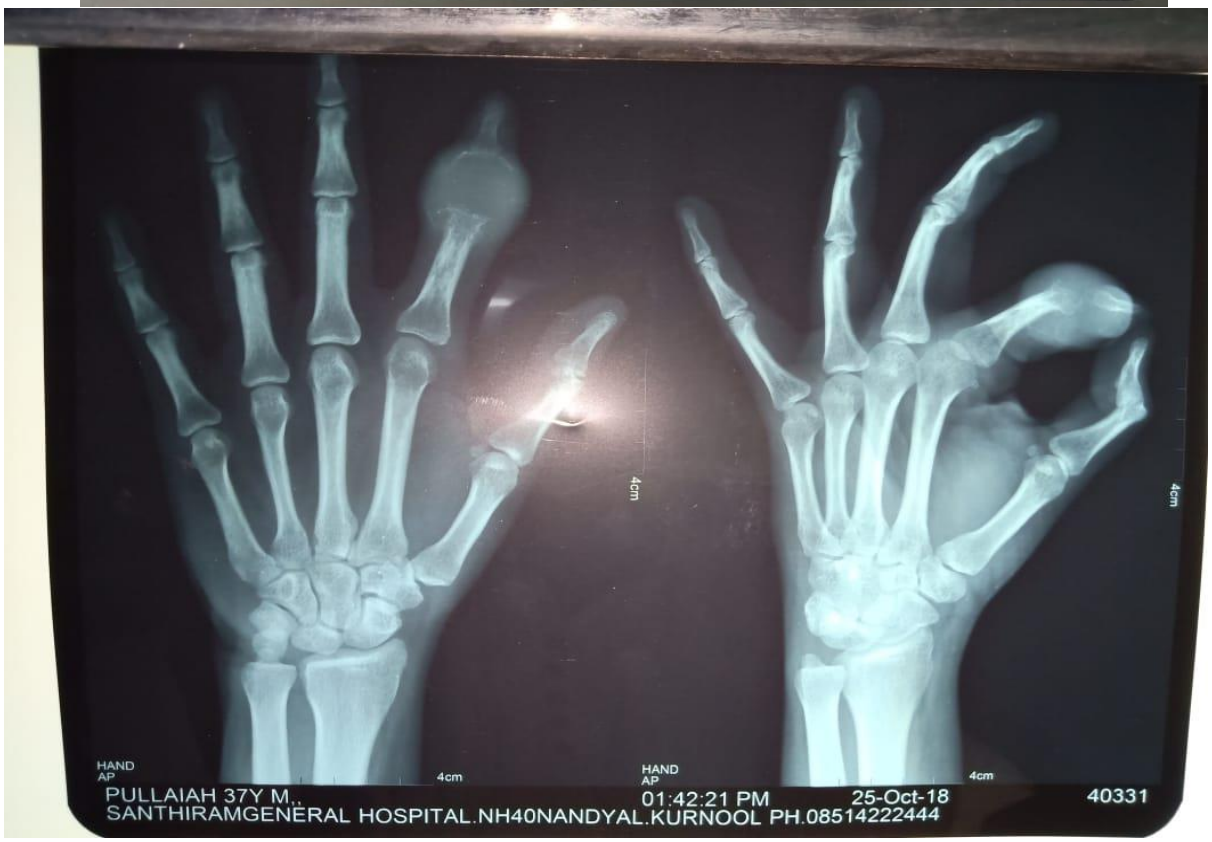
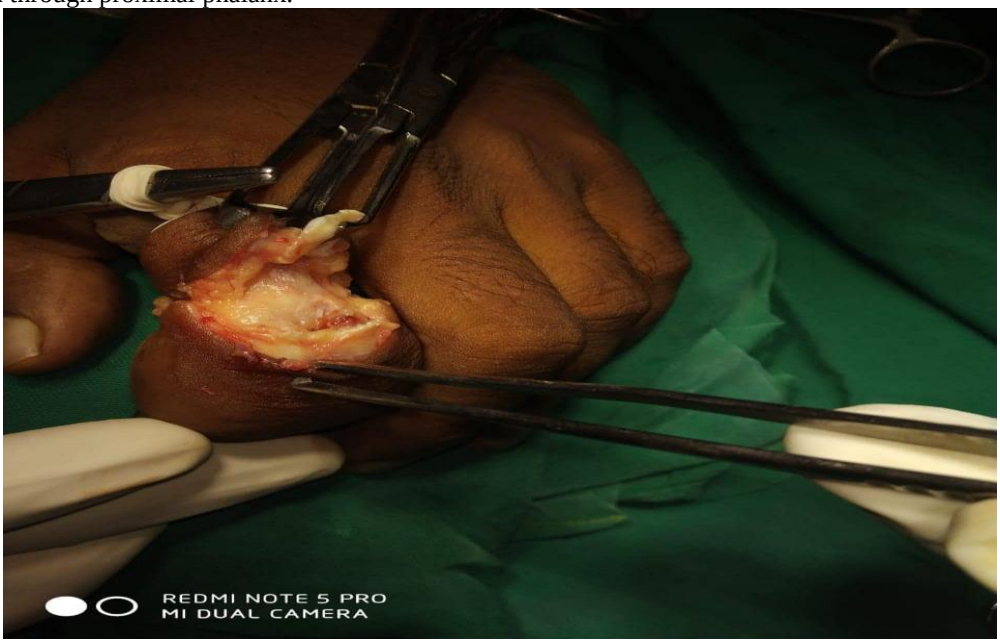
AI DUAL CAMERA

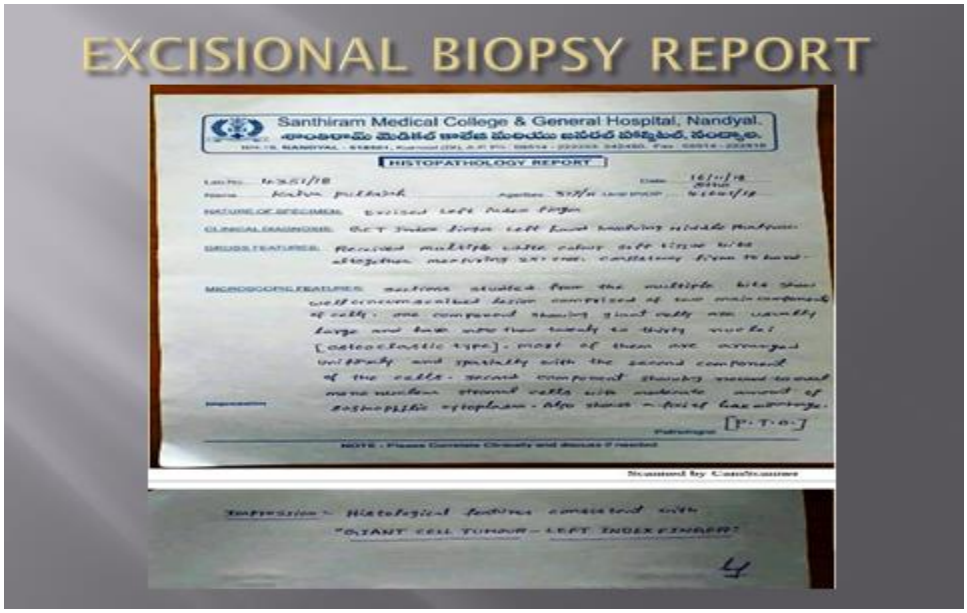


Expansile lesion.

1. No periosteal reaction and calcification.
2. Very thin cortical lining.
3. Giant cell tumour of middle phalanx of left index finger.

Treatment:
Amputation through proximal phalanx.





Differential diagnosis:
1. Aneurysmal bone cyst
2. Giant cell reparative granuloma
3. Chondroblastoma
4. Brown tumor
5. Chondromyxoid fibroma.
6. Benign fibrous histeocytoma
7. Non ossifying fibroma

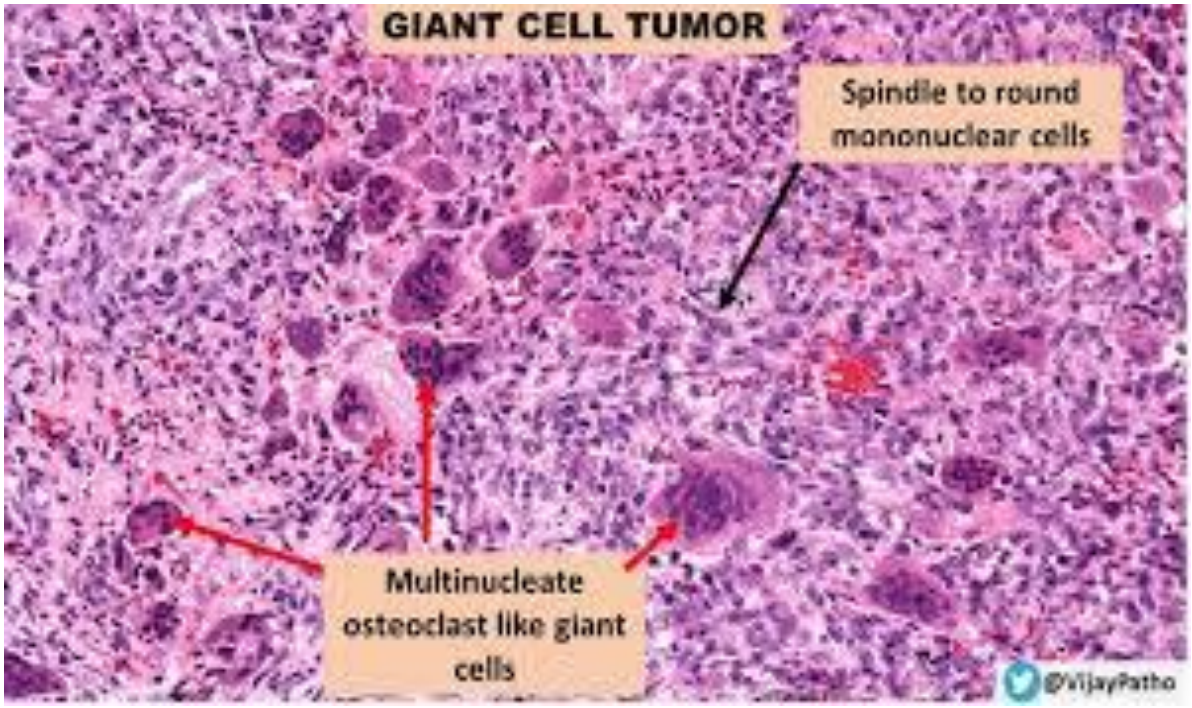
Discussion:

Defination:

Distinct neoplasm arising from non-bone forming supportive connective tissue of marrow with network of stromal cells regularly interspersed with giant cells. 75-80% OF PATIENTS 20-5O YRS.

More common in females.

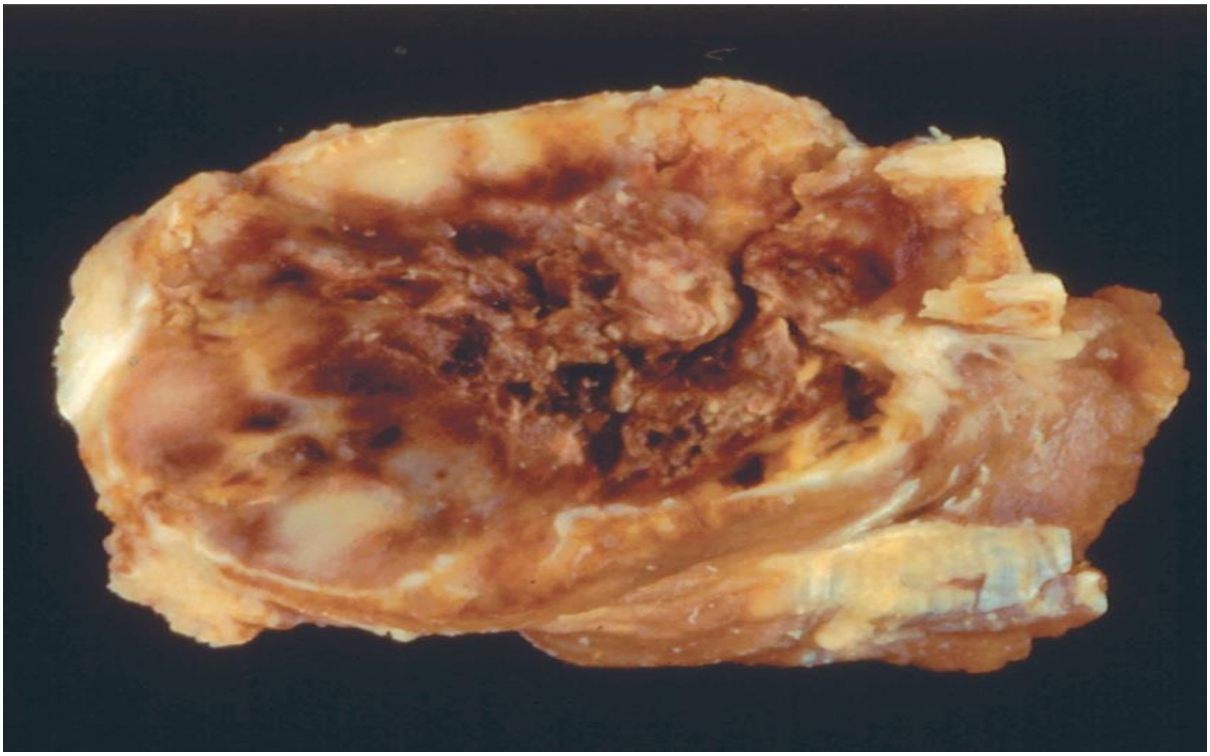
1. Epiphyseo metaphyseal in location.
2. 55% presents around knee joint.
3. 10% presents around distal radius.
4. 6% presents around proximal humerus.
5. Remaining sites are rarely involved.



Eccentrically situated.

1. Expansible lesion.
2. Trabeculations present/soap bubble appearance.
3. Egg shell crackling is characteristic feature.

4. Joint involvement might be seen
5. Not associated with periosteal reactions and intralesional calcifications.



Early lesions:
Homogenous friable reddish brown mass.

Late lesions:
Variegated appearance with blood filled areas.

Jaffe and litchenstein staging:
Grade one:
Numerous giant cells,stromal cells are rare and mitotic activity is rare.This is the benign side of lesion.

Grade two:
Few giant cells and stromal cells with moderate mitotic activity.

Grade three:
Numerous stromal cells,giant cells are rare and high mitotic activity.

No correlation exists between histological grading and clinical behavior of the tumour.Hence grading not widely accepted.
Treatment options:
Excision of bone where no disability/minimal disability occurs by excision.
eg: upper end of fibula
lower end of ulna

Excision and replaced by similar shape bone.
eg: lower end of radius(excision and replaced by upper end of fibula).

Curettage with high speed burr and lavage with liquid nitrogen/phenol/hydrogen peroxide and filling with bone graft/b
eg: lower end of tibia.
upper end of femur.
upper end of tibia.

Wide excision aand replaced by custom made prosthesis.
eg: lower end of femur.
upper end of tibia.

Excision and arthrodesis with bone graft.
Radiotherapy whenever surgical intervention is not posssible.
eg: spine

Complications :
1. Locally malignant.
2. Pathological fracture.