

Malignant Tumors of Connective Tissue-V



Dept Of Oral Pathology & Microbiology

Purpose Statement

A decorative circle with a teal outline and a white center, positioned below the title and above the main text area.

At the end of the lecture student should be able to

- Describe clinical features,& histopathological features of plasmacytoma & multiple myeloma
- Describe clinical features,& histopathological features of leiomyosarcoma, & metastatic tumors of jaws.

Learning Objectives

No.	Learning Objectives	Domain	Level	Criteria	Condition
1	Enumerate clinical features	Cognitive	Must Know	All	
2	Write classification	Cognitive	Must Know	All	
3	Write pathogenesis	Cognitive	Must	All	

CONTENTS



- 🦷 Solitary plasma cell myeloma/plasmacytoma
- 🦷 Multiple myeloma
- 🦷 Leiomyosarcoma
- 🦷 Rhabdomyosarcoma
- 🦷 Metastatic tumours of jaw

Solitary Plasma Cell Myeloma/Plasmacytoma

- ☛ Unifocal, monoclonal, neoplastic proliferation of plasma cells, usually arises within bone
- ☛ **Solitary bone plasmacytoma**- Plasmacytoma of skeletal system
- ☛ **Extramedullary plasmacytoma**-Soft tissue plasmacytoma

Clinical features



- 🦴 Age-50-60 yrs, average 55 yrs
- 🦴 Sex-M>F
- 🦴 Site-red marrow containing axial skeleton(vertebral column)
- 🦴 Pain at site of skeletal lesion
- 🦴 Discovered in routine radiographs

Oral manifestations

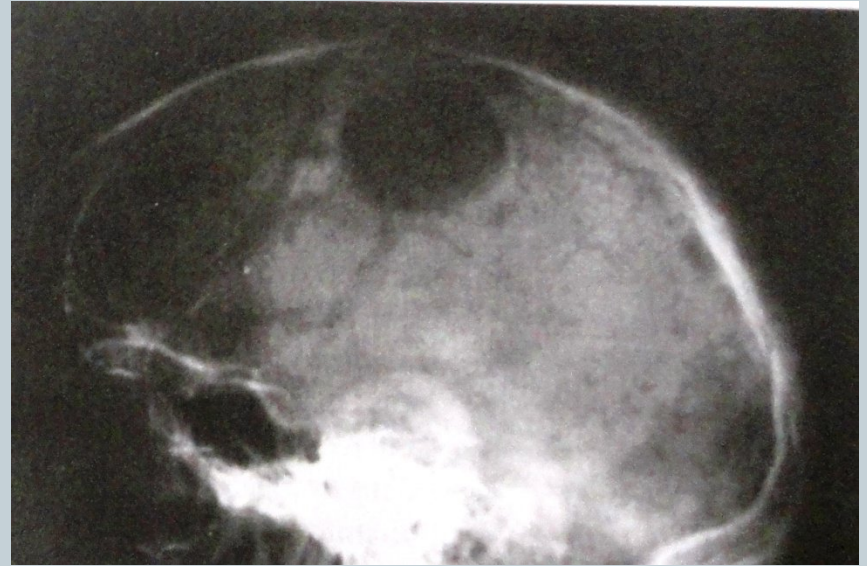


- 🦷 Maxilla & mandible
- 🦷 Extramedullary- gingiva, palate, floor of mouth, tongue, tonsils, etc.

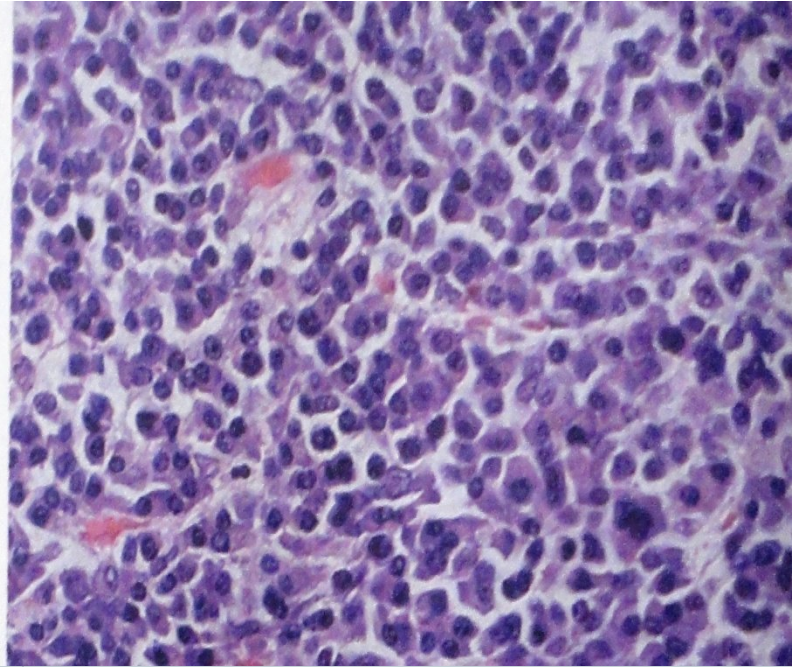
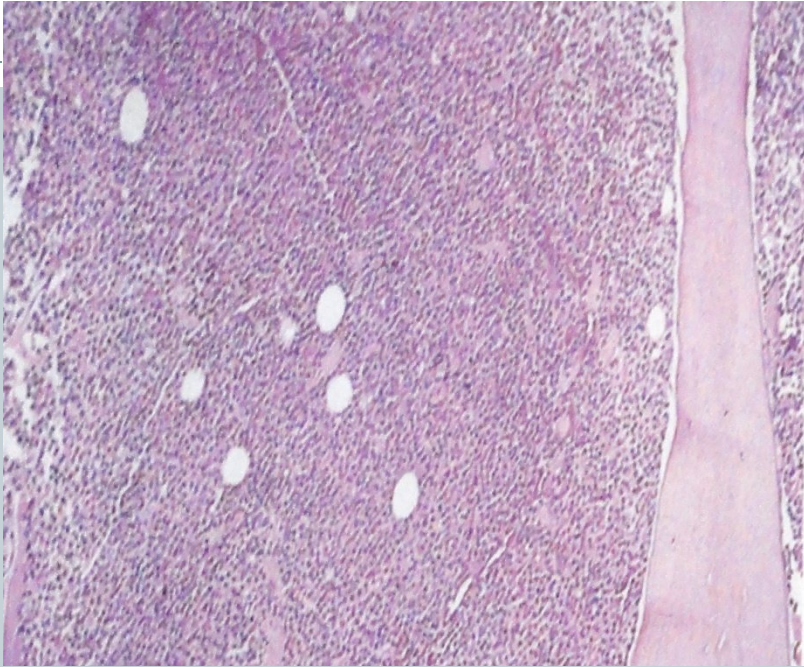
Radiographic features



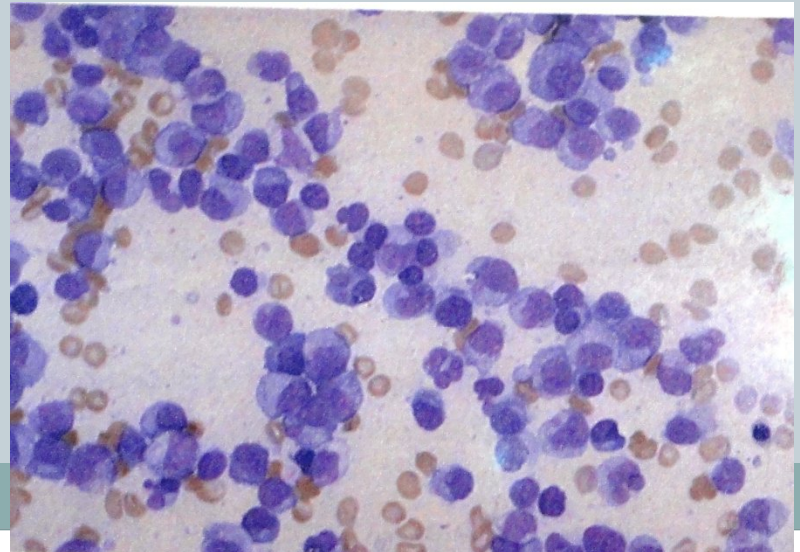
👤 Unilocular ,well defined radiolucency with no evidence of sclerotic borders.



Histopathological features



Sheets of plasma cells
showing varying degrees
of differentiation



Multiple myeloma



- 🧠 Aggressive part of a spectrum of plasma cell neoplasms- Multiple myeloma
- 🧠 Multicentric in origin

Clinical features



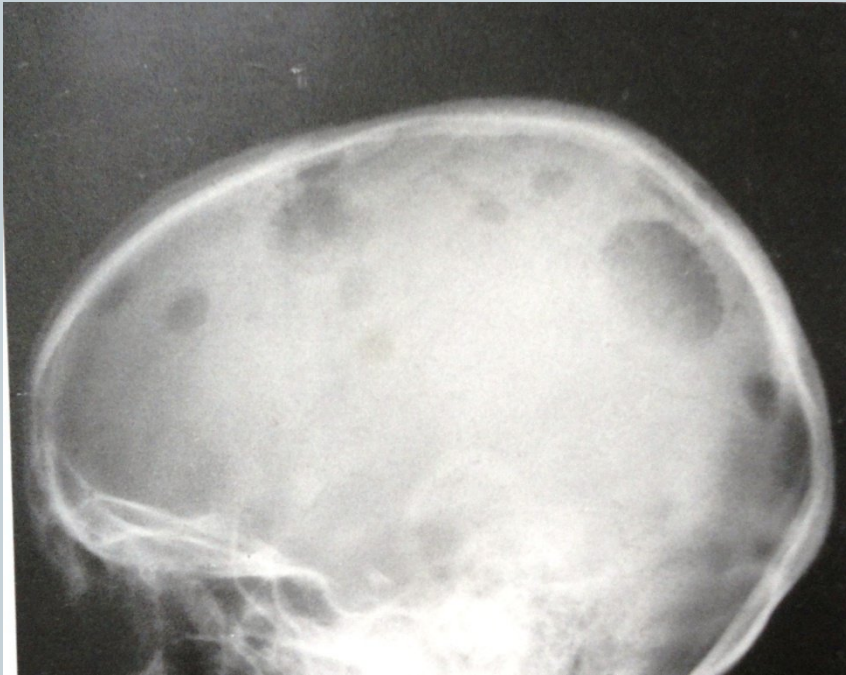
- 🦴 Age- typically disease of adults ,over 60 yrs, rarely before 40
- 🦴 Sex-M>F
- 🦴 Race-Blacks> Whites
- 🦴 Bone pain-characteristic feature
- 🦴 Pathologic #, Fatigue, Anemia.

Oral manifestations

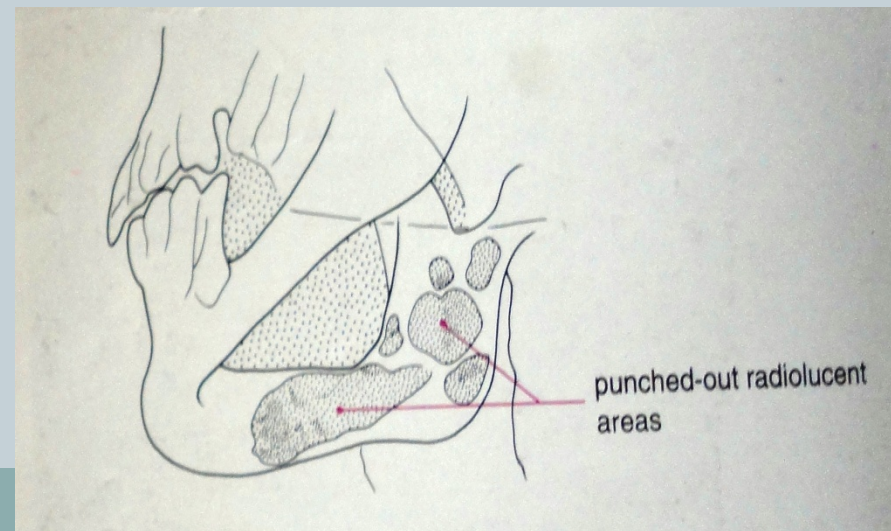
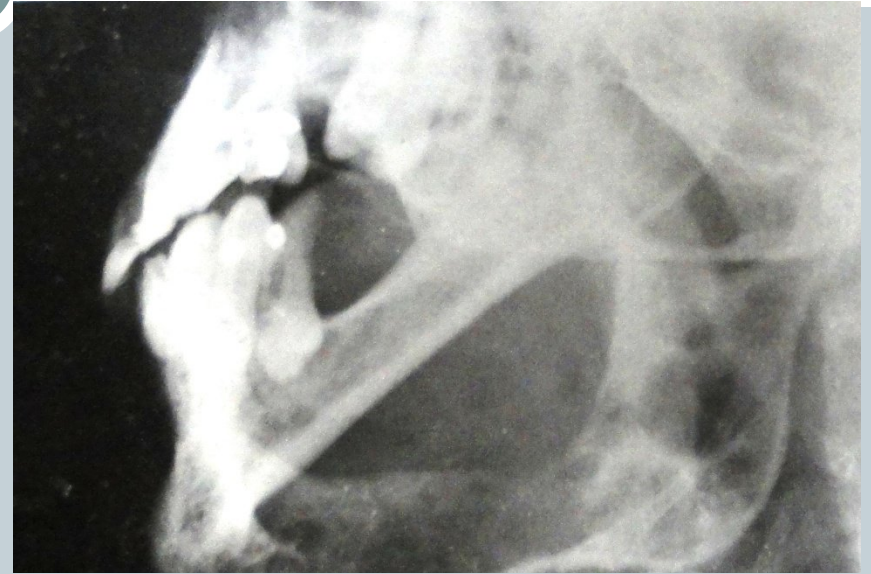


- 🦷 Mandible > maxilla
- 🦷 Pain
- 🦷 Swelling
- 🦷 Expansion of jaws
- 🦷 Mobility of teeth

Radiographic features



“Punched out”
radiolucencies



Laboratory findings

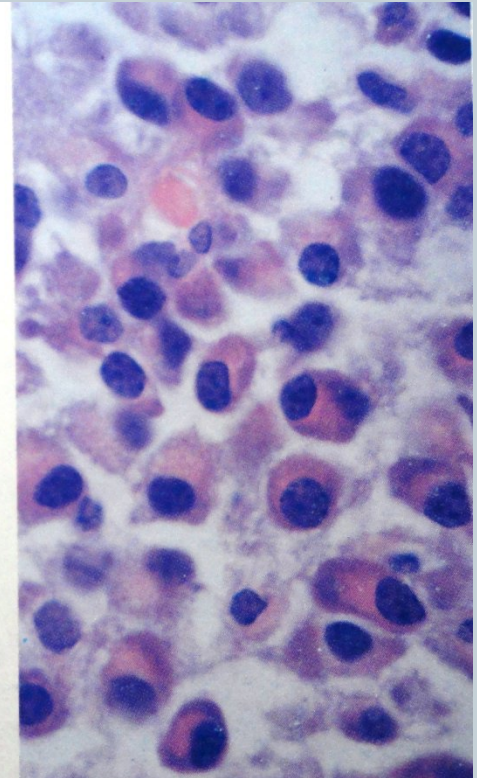
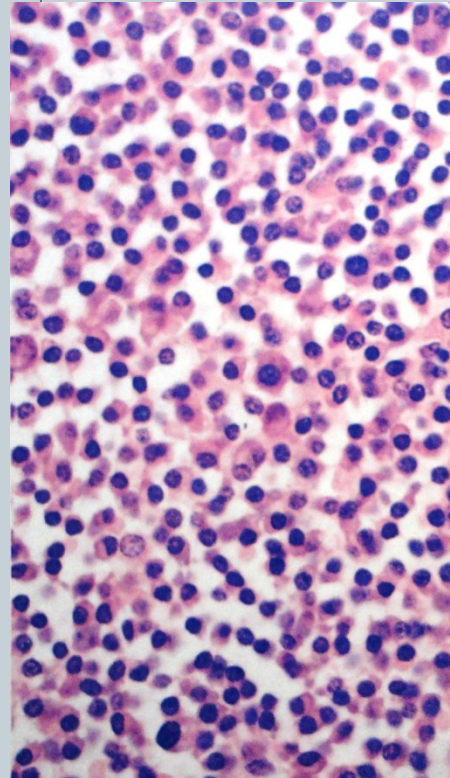


- 🧠 Serum-monoclonal Hypergammaglobulinemia
- 🧠 Urine- **Bence Jones Proteins**

Histopathology



🧠 Monotonous Sheets of cells resembling plasma cells-round or ovoid cells with eccentrically placed nucleus, chromatin clumping-cartwheel pattern



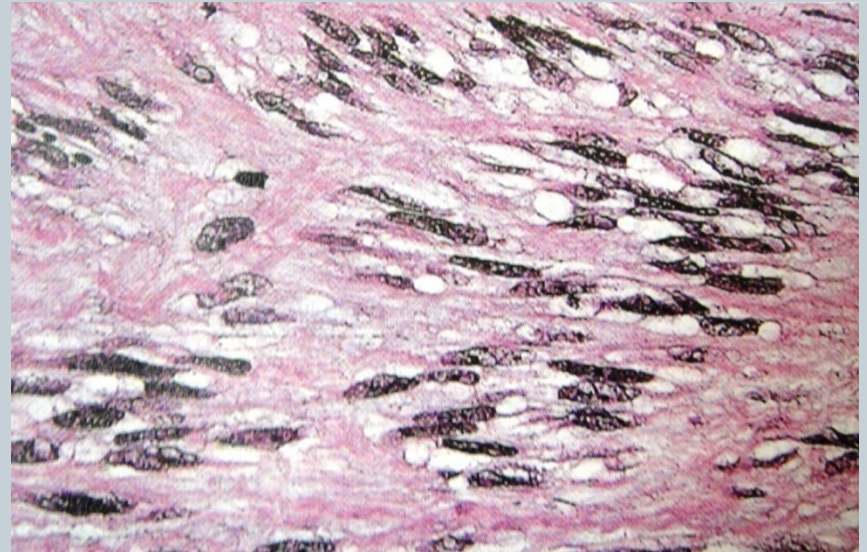
LEIOMYOSARCOMA



- 🦋 Malignant tumor of smooth muscle .
- 🦋 Mostly in middle aged persons .
- 🦋 Painful, lobulated ,fixed mass of submucosa.
- 🦋 No gender predilection.

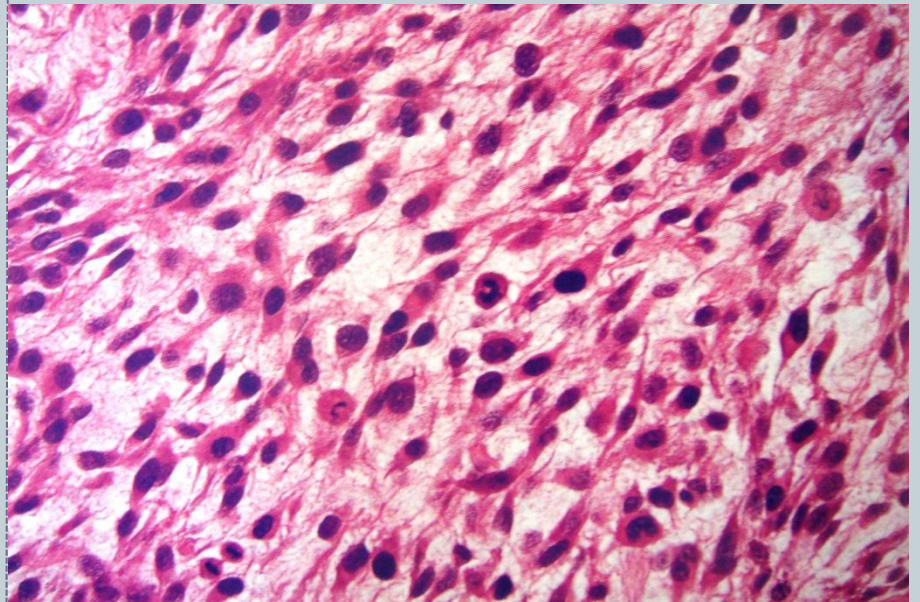
Histopathology

- ☛ Composed of fascicles of interlacing spindle-shaped cells.
- ☛ Cigar shaped nuclei.



RHABDOMYOSARCOMA

- 👤 Malignant tumor of STRAITED MUSCLES.
- 👤 Tad –pole shape cells





RHABDOMYOSARCOMA

Metastatic tumors of jaws

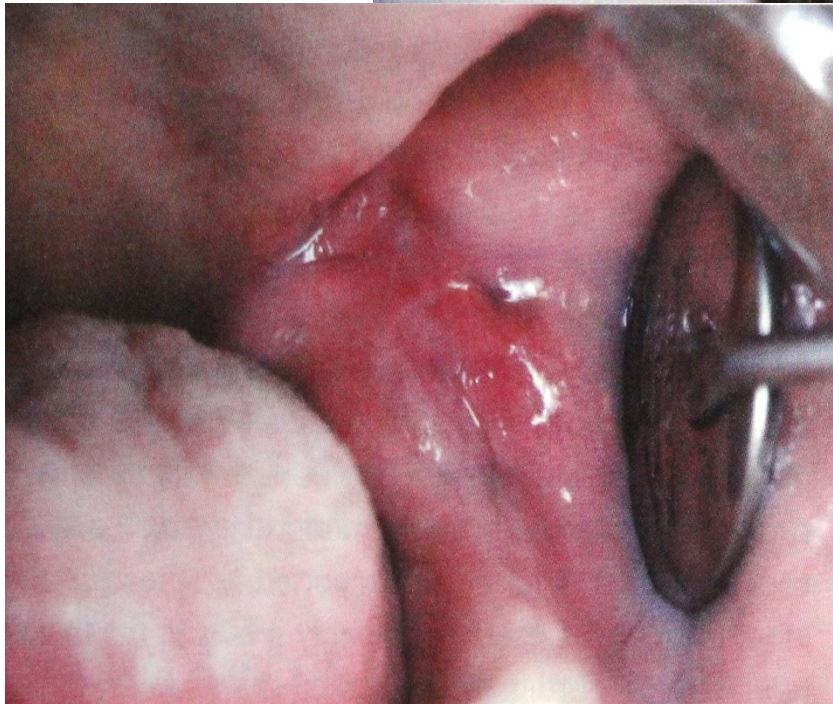
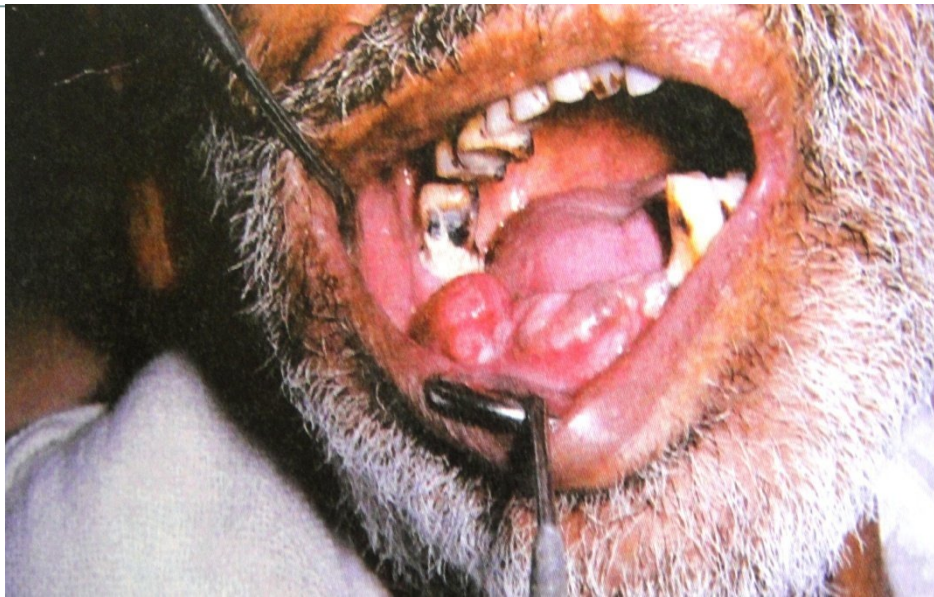


- ☛ Rare
- ☛ In dentulous patients- mostly seen in attached gingiva.
- ☛ In edentulous –in tongue & alveolar mucosa
- ☛ Rich capillary network of inflamed gingiva entraps malignant cells.

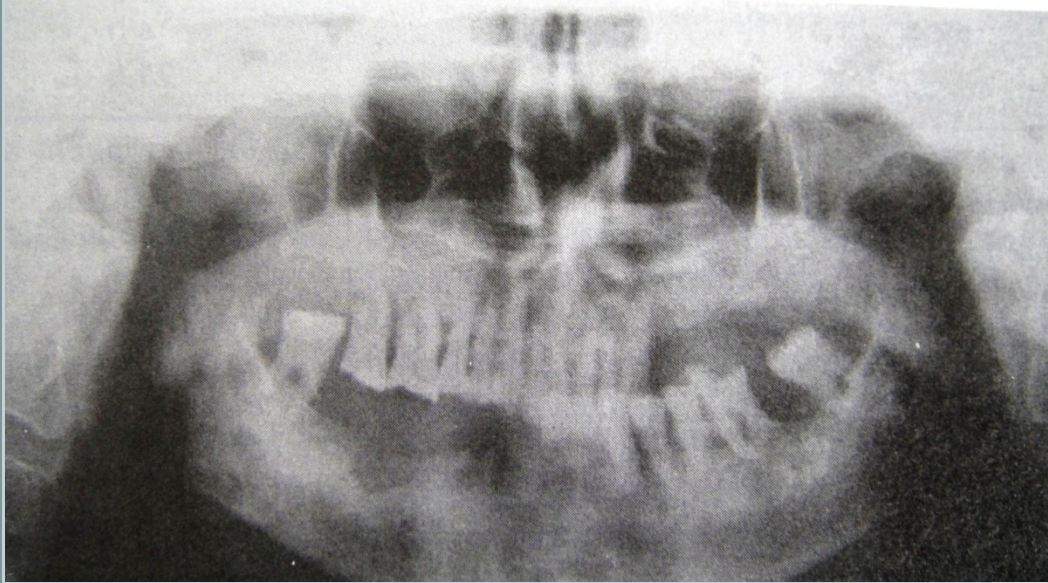
Clinical features



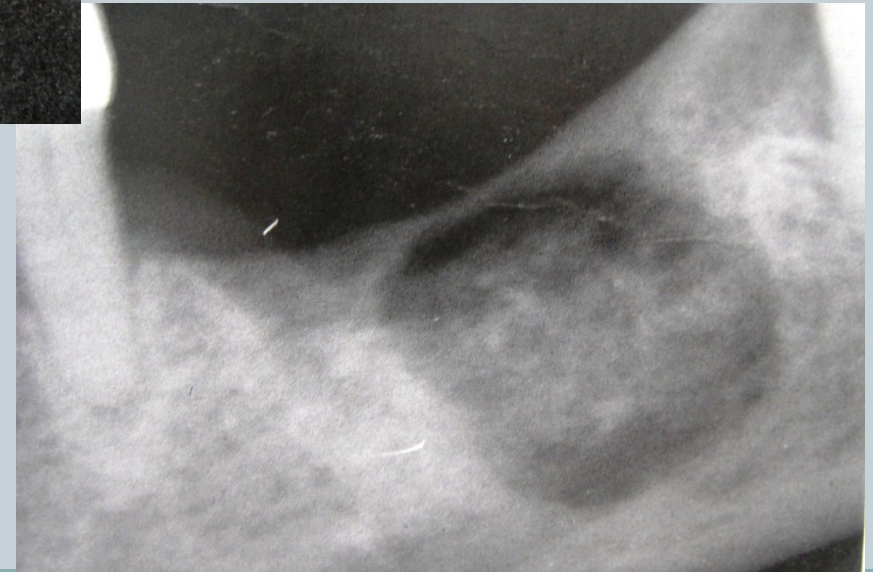
- 🦷 40-70 years of age.
- 🦷 Sources of metastatic tumors to oral region are cancers in breast, lung, kidney, bone.
- ❖ Initially asymptomatic
- ❖ Slight discomfort / pain, paresthesia.
- ❖ Teeth –loose, extruded, difficult mastication.
- Metastatic tumors of soft tissue
- ❖ Resembles hyperplastic/ reactive lesion

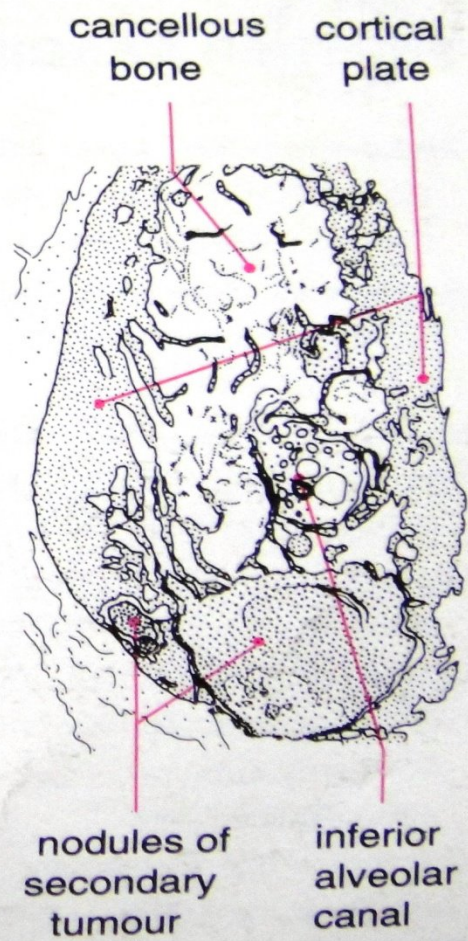
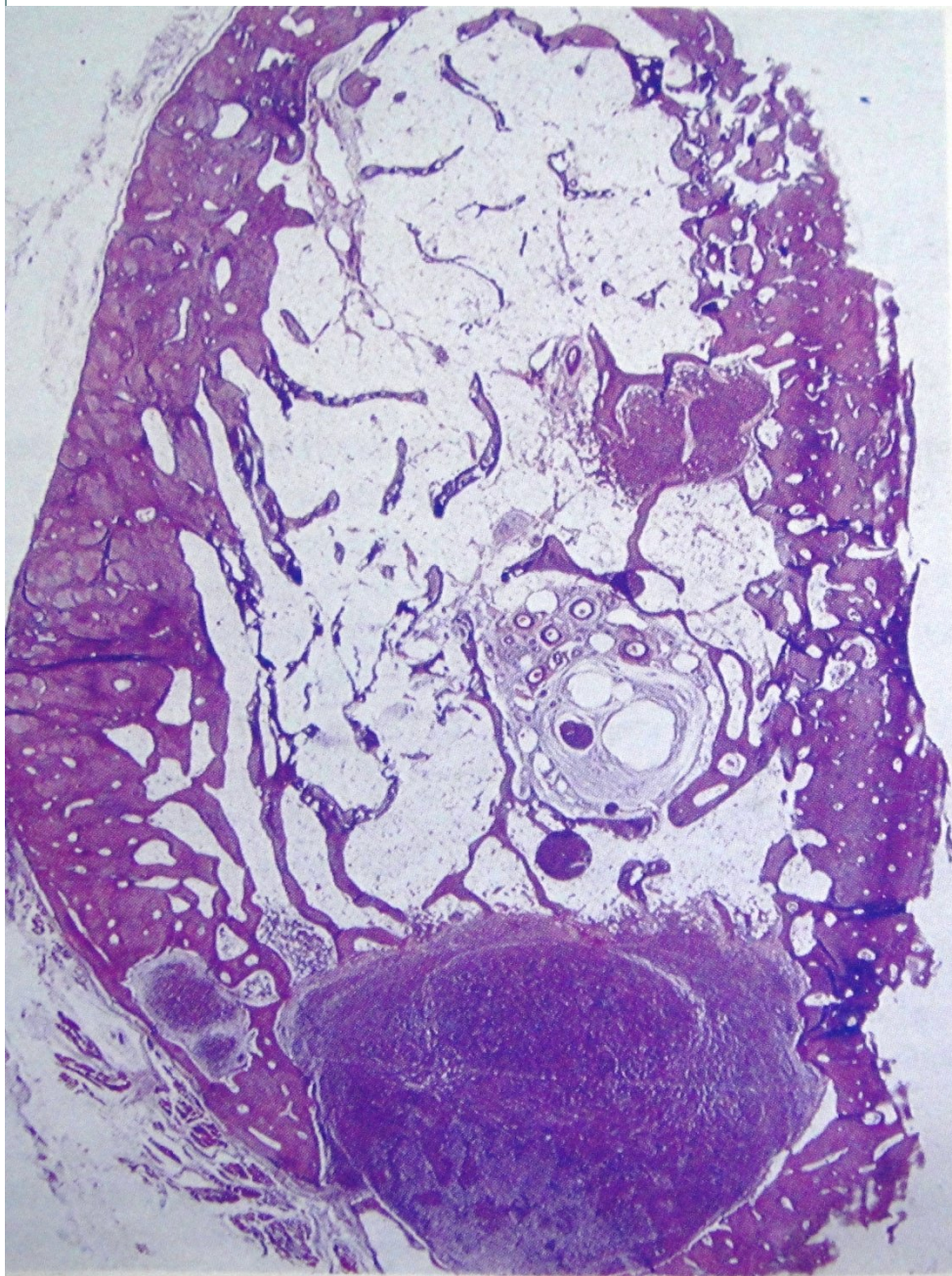


Radiographic features



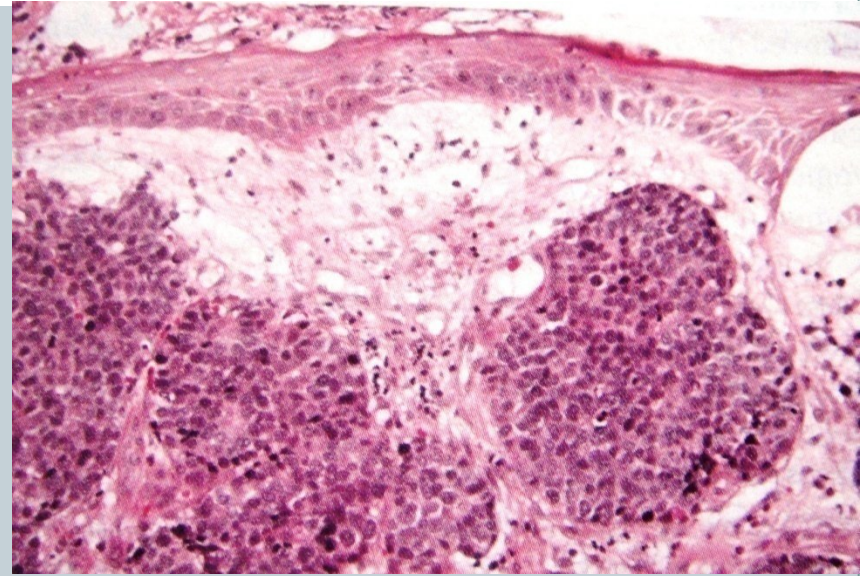
Osteolytic destructive lesion





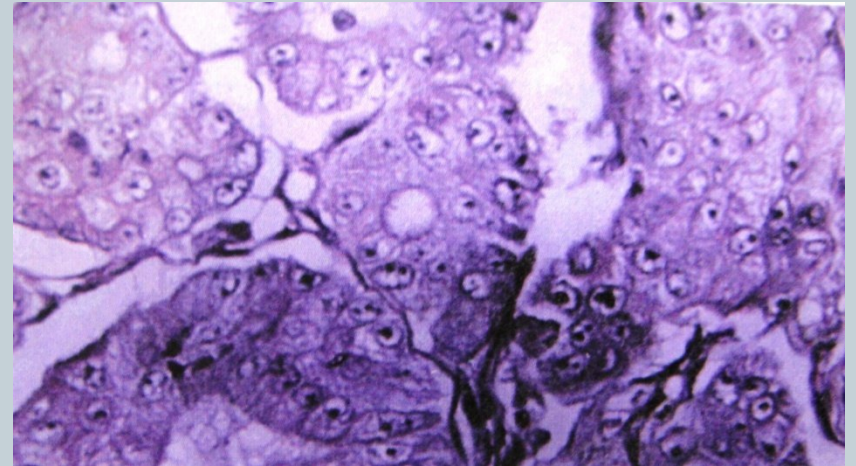
Histopathological features

- 👤 Resembles to the primary tumor
- 👤 Ductal carcinoma-metastatic breast carcinoma



🧠 Clear cell carcinoma-
metastatic renal cell
carcinoma

🧠 Intraosseous
squamous cell
carcinoma-metastatic
squamous cell
carcinoma of lung



Summary



Clinical features,
Histopathological features of
Plasmacytoma & Multiple myeloma

Clinical features,
Histopathological features of
Leiomyosarcoma, & Metastatic tumors of
jaws

BIBLIOGRAPHY

- Shafer's Text Book of Oral Pathology 5 & 6th edition
- Oral and maxillofacial pathology Neville, Braden 2nd edition
- Lucas's pathology of tumors of the oral tissues Cawson, R. 5th edition
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Thank You