

Bone diseases Tutorial

Oral Medicine

DENT5310

A/Prof Omar Kujan

Case 1

- **Case summary:**

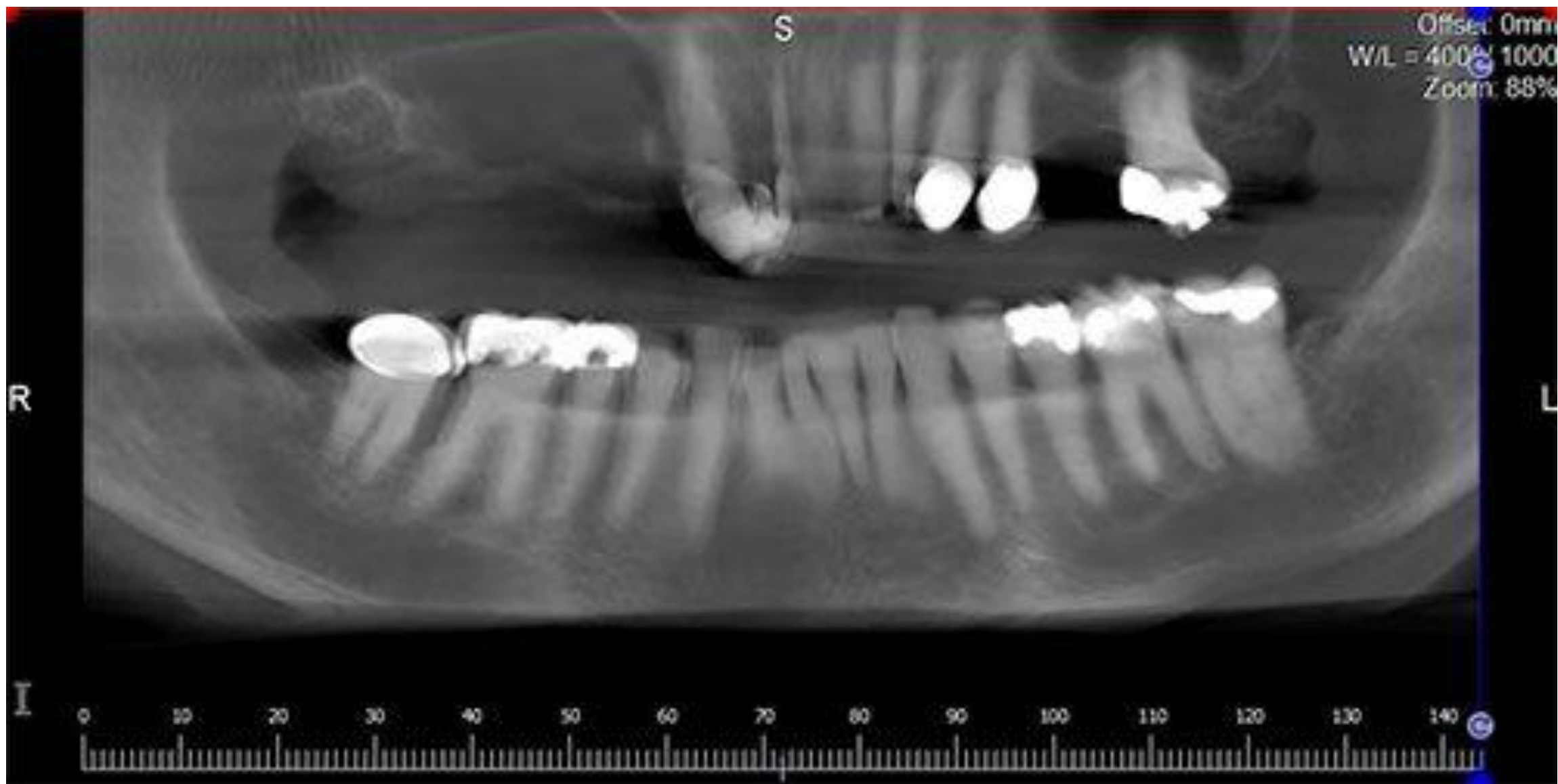
A 73-year-old female with dementia who was presented to a general dentist with a swelling and purulence drainage involving the right posterior maxillary teeth 14, 15, 16 and 17 which were extracted.

- **Past medical history**

The past medical history is significant for dementia, hypertension and liver disease.

Clinical exam





Activity

- Discuss the clinical and radiological presentations
- Discuss your treatment and differential diagnosis

Clinical description

- The image shows the oral cavity with a clearly visible, well-defined, smooth, dome-shaped lesion that appears translucent and pinkish in colour. The surface is ulcerated.
- There are no evident signs of inflammation, ulceration, or bleeding surrounding the lesion.
- The lesion is round to oval, smooth-surfaced, and protrudes significantly from the surrounding tissue with an approximate size of 1 CM.

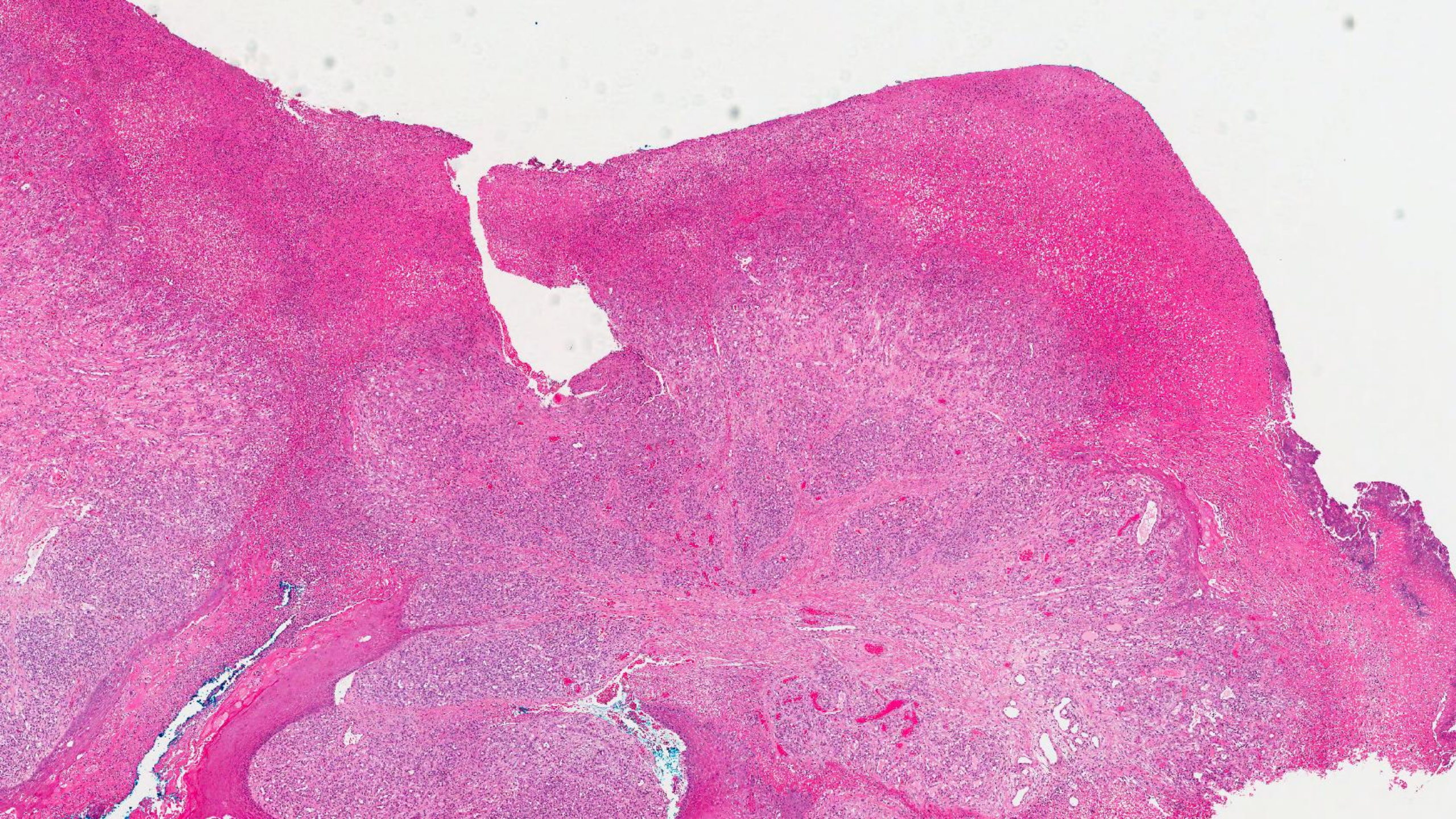
Imaging description

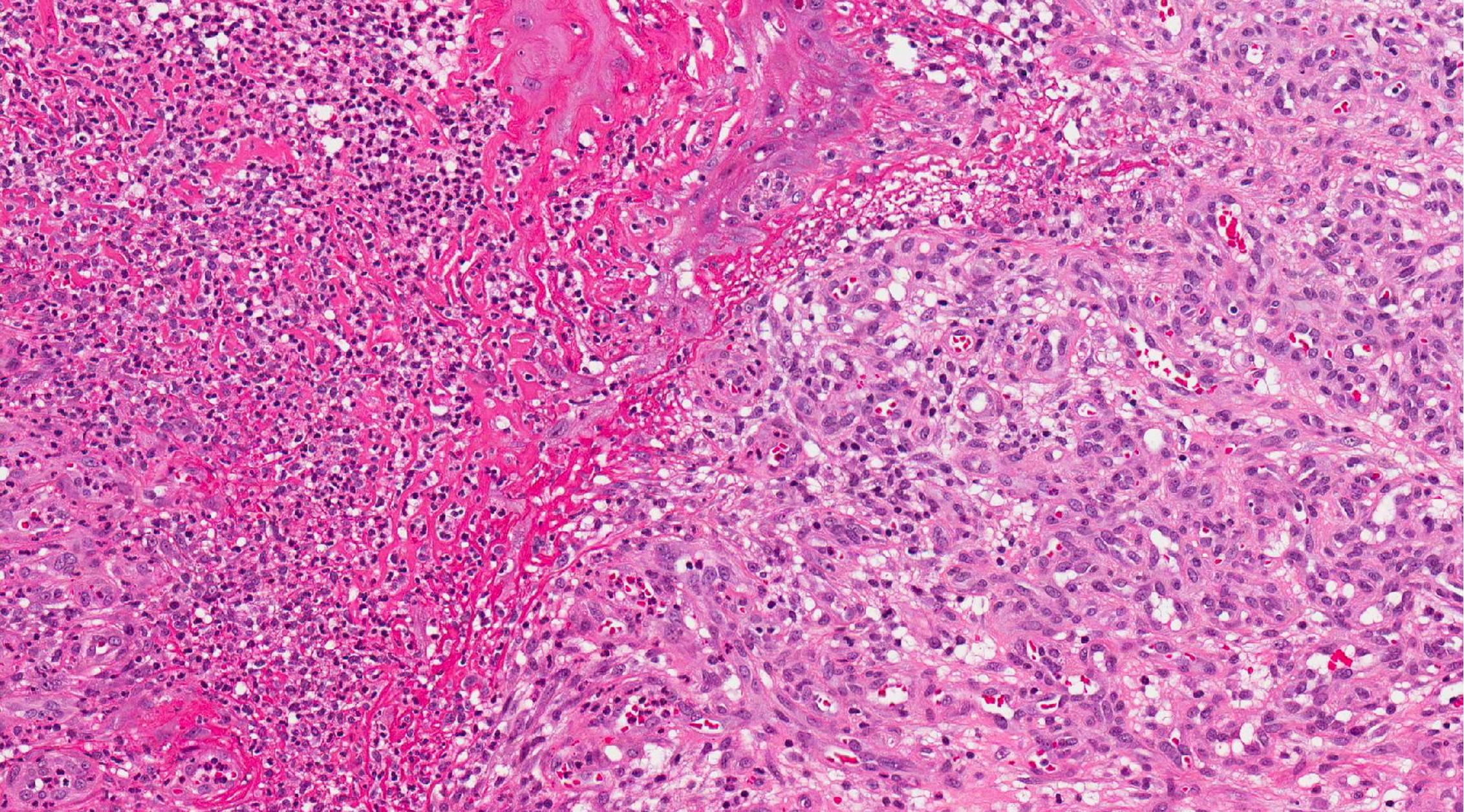
- This is a panoramic view of the CBCT imaging taken by the oral Surgeon's office at first clinical presentation demonstrating a large right maxillary sinus which is appearing cloudy. Compare with the contralateral left maxillary sinus which is clear.
- The alveolar ridge is slightly eroded but there is no intra-osseous lesion.

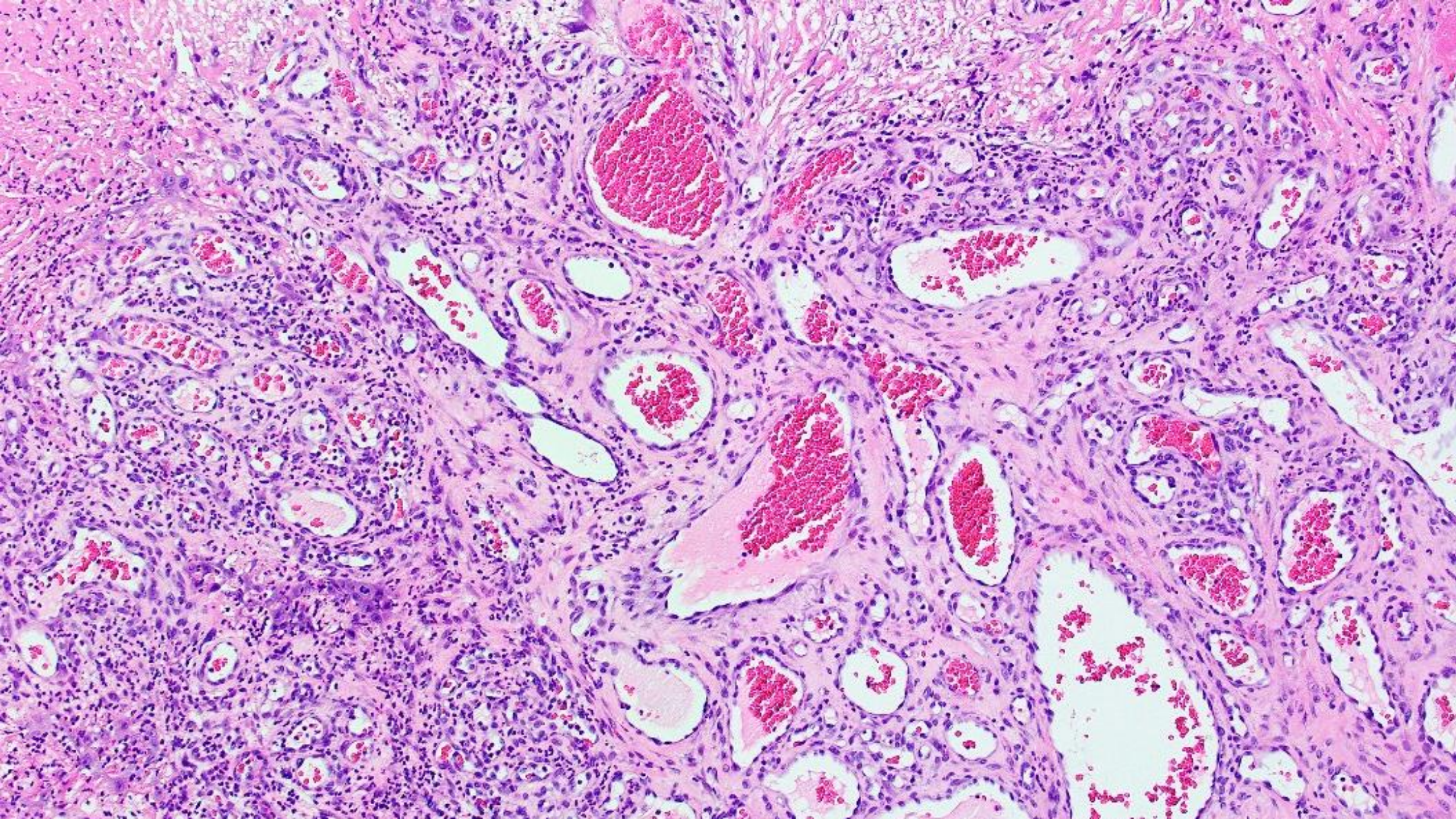
Differential diagnosis

- Reactive benign lesion; pyogenic granuloma
- Malignant tumour: SCC, Melanoma, Lymphoma

Incisional biopsy results







Microscopic description

- Lobular pattern of vascular proliferation with inflammation and edema resembling granulation tissue
- Thin epidermis at top with variable ulceration
- Acanthosis and hyperkeratosis at sides
- Central branching vessel is called capillary or vascular lobule, with no / rare red blood cells, surrounded by endothelial cells
- Deep lesions often lack edema and inflammation

Diagnosis

- Pyogenic granuloma

Treatment

- Surgical removal of the lesion.

Case 2

- **Case summary:**

A 17-year-old male whose chief complaint is of right facial swelling and asymmetry of six months' duration.

- **History of present illness**

The patient has had regular dental and medical care. There was no evidence of pain, neurological abnormalities or malocclusion. The condyle and coronoid processes were not affected.

- **Past medical history**

The past medical history is significant for diabetes type 1.



Activity

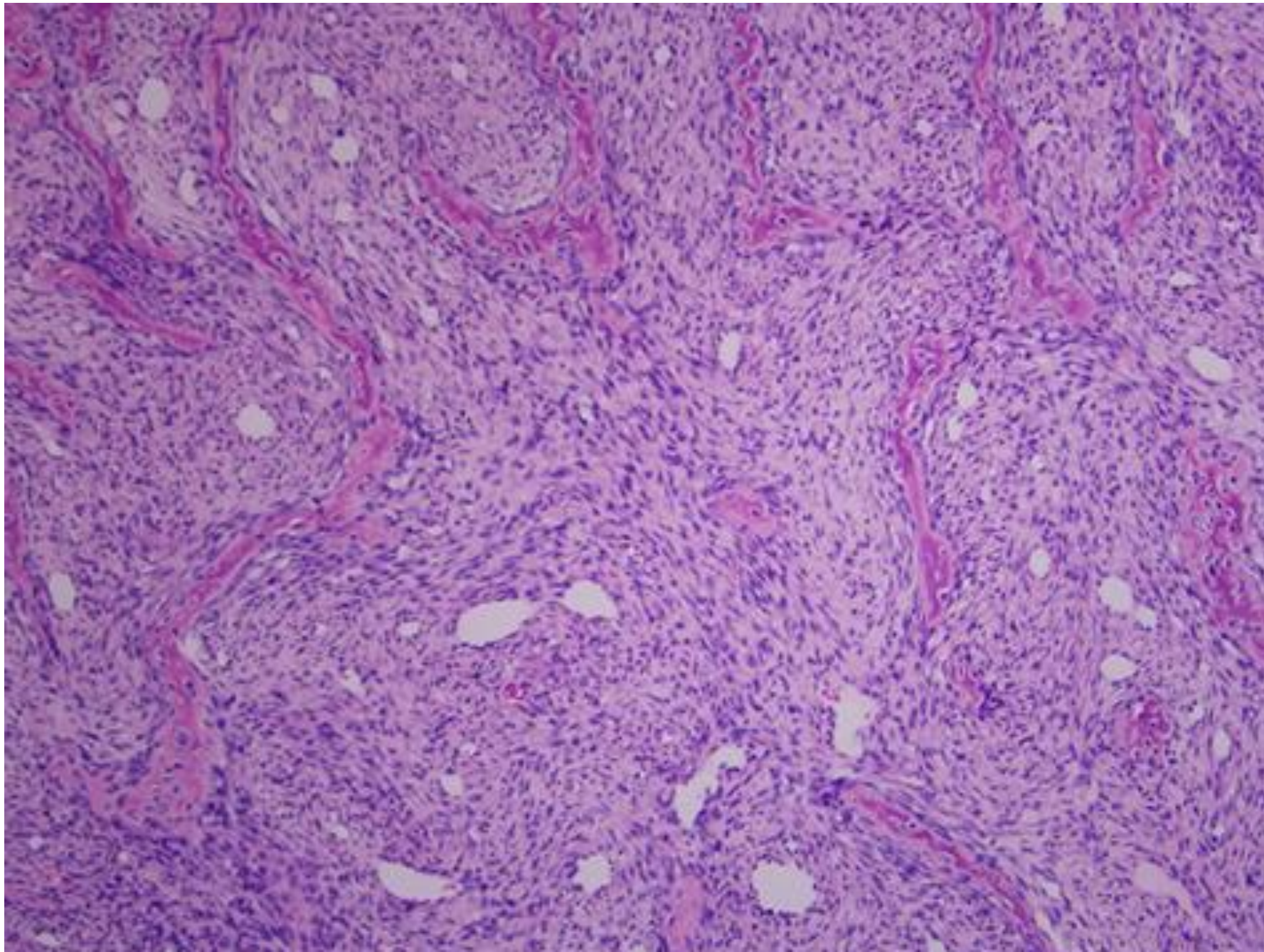
- Discuss the clinical and radiological presentations
- Discuss your treatment and differential diagnosis

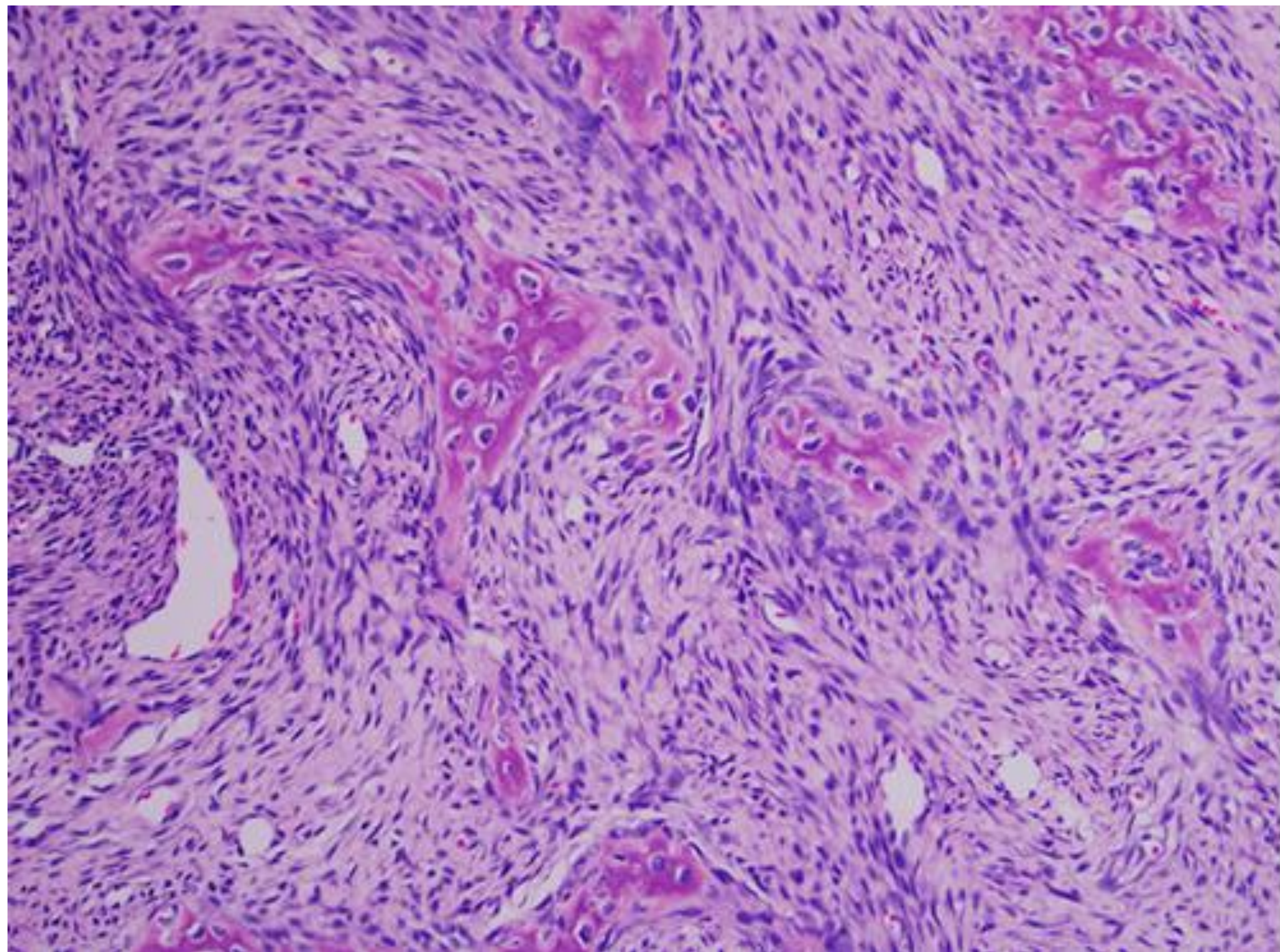
Imaging description

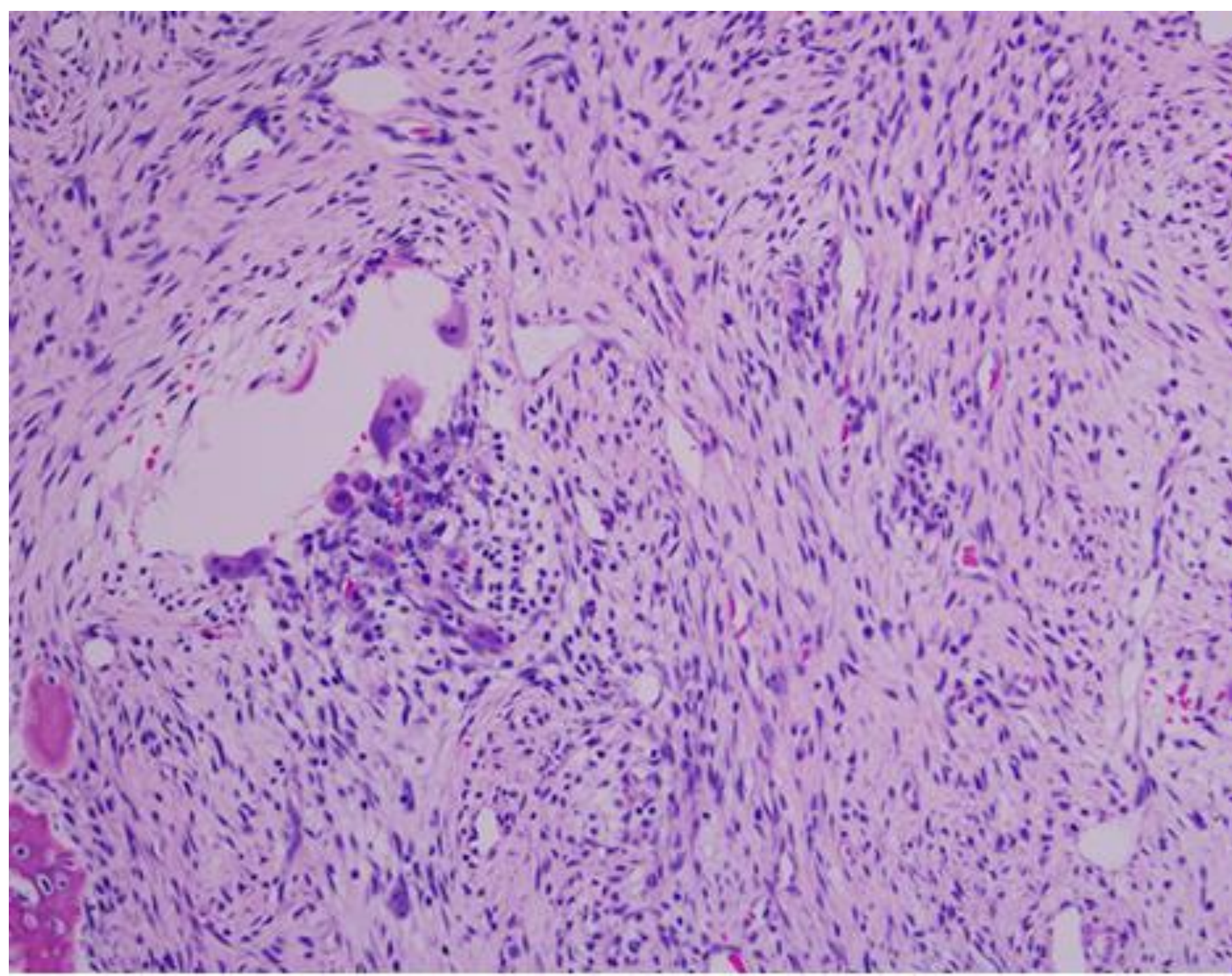
- Cone Beam CT view at first presentation demonstrating large unilocular and expansile radiolucency with some generalized fine radiopacity involving most of the right posterior mandible and part of the ramus sparing the condyle and the coronoid processes.

Differential diagnosis

- Aneurysmal bone cyst
- Fibrous dysplasia
- Brown tumour of hyperparathyroidism
- Juvenile ossifying fibroma







Microscopic examination

- Multiple fragments of decalcified hard and soft tissue made up of a benign fibro-osseous lesion. It is composed of irregularly shaped and woven-type bony trabeculae surrounded by cellular fibrous connective tissue stroma. The bony trabeculae are of variable shapes and sizes; some show significant osteoblastic rimming. In focal areas, the connective tissue stroma has clusters of multinucleated giant cells

Diagnosis

- Juvenile ossifying fibroma

Treatment

- Surgical enucleation