



How do I diagnose Cystic Ameloblastoma

Andreas Mrachacz

Affiliation: Pathologist, Fürth, Germany

Klaus Kayser, Thomas Kühnel, Spiridula Pappa, Frank Schmidt

Differential diagnoses: Odontogenic cyst, salivatory gland cyst, paradontitis.

Side findings: None.

Abstract

This 59 year old woman presented with teeth pain. Brown red material measuring 6x4 x3 mm of soft consistence was excised from the region 16.

Virtual Slides: www.diagnosticpathology.eu/vs/2015_1_91/

Feldfunktion geändert

Anamnesis / History

Unsuspectious.

Gross - microscopic findings

Brown to grayish red soft tissue measuring 6 * 4 * 3 mm.

Microscopy

A small cyst built by ciliated cells, several small clusters of pale solid cells with abundant cytoplasm, small nuclei and muroid alteration were surrounded by lymphocytes and plasma cells were noted. No mitotic figures, no necrosis.

Expression of markers

Not applied.

Discussion

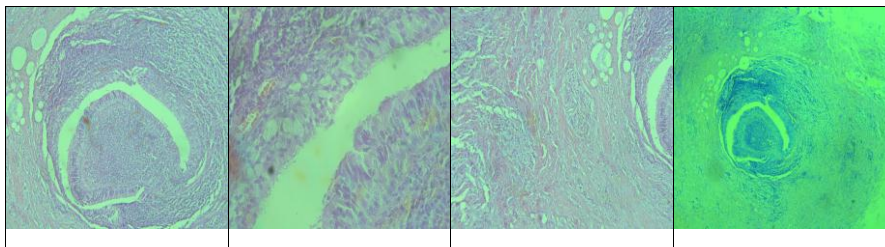


Ameloblastoma account for about one percent of all oral tumors with an incidence rate of approximately 1.5 - 2.0 per one million inhabitants and equal gender affection. Most of them are side findings when apical granulomas, radicular or follicular cysts are excised in order to treat chronic paradontosis or infected cysts. Ameloblastoma tumor cells might be mistaken for histocytes and vice versa. Characteristic features such as "fish net pattern" or "cord like fashion" might not be seen in small biopsies. Characteristic features are separated clusters of solid tumor cells with surrounding collagen fibres / connective tissue, only scattered chronic inflammatory cells and, like in our case, compartments of a cyst with ciliated cells and "depolarized" nuclei. Only a few number of malignant cases has been reported, commonly associated with large tumor masses.

Hallmarks of Diagnosis

Cystic formation with depolarized nuclei, cord like growth pattern, solid separated tumor cell nests.

Images (for full size images see supplements)



Keyword - Diagnosis: [Cystic ameloblastoma](#)

Keyword - differential diagnosis: [Dental cyst](#)

Keyword - side findings: [Inflammation](#)

Keyword - organ: [Maxilla](#)

Keyword - methods: [Excision](#)

Keyword - others:



Online References (PubMed)

1. Keszler A, Paparella ML, Dominguez FV (1996) [Desmoplastic and non-desmoplastic ameloblastoma: a comparative clinicopathological analysis. Oral Dis 2 \(3\): 228-31. doi:10.1111/j.1601-0825.1996.tb00229.Q. PMID 9081764](#)
2. Shear M, Singh S (1978) [Age-standardized incidence rates of ameloblastoma and dentigerous cyst on the Witwatersrand, South Africa". Community Dent Oral Epidemiol 6 \(4\): 195-9. doi:10.1111/j.1600-0528.1978.tb01149.Q. PMID 278703](#)