How do I diagnose Odontoma

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Differential diagnoses: Ameloblastoma, inflammation, calcification, foreign body reaction.

Side findings: None.

Abstract

This 17 year old man of Turkish descent developed a solid somewhat painful mass at the region 37. X-rays displayed with a solid bony density measuring 4 * 5 * 4 mm. The lesion was extracted. Histological examination revealed a solid non-structured, circumscribed cementum mass with a small central bony area and some surrounding fibrous fibers. Postoperative course was unsuspicious.

Virtual Slides: www.diagnosticpathology.eu/vs/2015_1_92/

Anamnesis / History

Unsuspecious

Gross - microscopic findings

The excised solid whitish bone like material with some bloody markings measured 4x5 x4 mm, in consistency with the radiological findings. X-rays displayed with a solid mass in the neighbourhood of the tooth 37.

Microscopy

Solid, cementum-like material without structures. A small bone-like area can be noticed in the center. The marked boundary is formed by small collagen fibers. These are surrounded by scattered lymphocytes and plasma cells.

Expression of markers

Not applied

Discussion
Two main types of odontomas are recognized, namely a) compound odontoma built by enamel, dentin, and cementum, usually occurring in the anterior maxilla, and b) complex type of odontoma in which dental tissues cannot be detected. It occurs in the posterior maxilla and displays with solid radiological density. Odontomas usually occur in young men and women, and might not be recognized in many cases. Most tumors are singular; however, multiple lesions occur too. Rida Ahmed removed 232 similar lesions of the mouth of a 17 year old man [1]. Recurrences are rare. Malignancy has not been reported to our knowledge.

**Hallmarks of Diagnosis**

X-ray findings; Solid mass composed of enamel, dentin, and cementin; or non structured cementum - like material surrounded by collagen fibres.

**Images** (for full size images see supplements)

**Keyword - Diagnosis:** Odontoma, complex type  
**Keyword - differential diagnosis:** Paradontosis, calcification  
**Keyword - side findings:** None  
**Keyword - organ:** Posterior maxilla  
**Keyword - methods:** Extraction  
**Keyword - others:**
Online References (PubMed)