

Ossifying fibroma of the jaw

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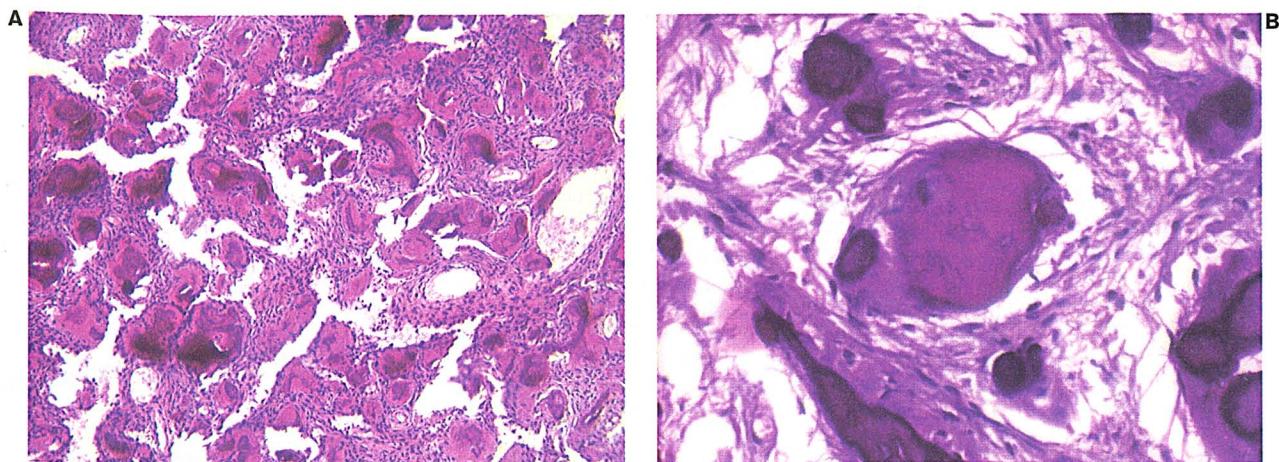


Figure. A: Under moderate magnification, bland spindle cells are seen surrounding islands of osseous material with variably heavy calcification (H&E). B: High-power magnification shows the very bland spindle cells surrounding areas of bone formation with calcium deposition.

Ossifying fibroma of the jaw is a benign, fibro-osseous lesion that is part of a larger family of fibro-osseous lesions that includes juvenile active ossifying fibroma, psammomatous ossifying fibroma, and extragnathic ossifying fibroma of the skull. Ossifying fibromas of the jaw are well-circumscribed, slowly growing lesions. They are often mentioned in the same differential diagnosis as fibrous dysplasia, but it is important to make the distinction because the former lends itself to ready enucleation, while the latter can be admixed with surrounding tissues, making surgery more complicated.

Patients generally present with a history of a painless expansion of a tooth-bearing portion of the mandible. Lesions of the maxilla are also encountered, but they are less common. Radiographically, the lesions are typically 1 to 5 cm at their greatest dimension. Well-defined areas of osteolysis are noted radiographically, with varying degrees of calcification and cortical thinning. As suggested

earlier, these lesions can often be readily identified at the time of surgery by noting the ease with which they can be separated from surrounding tissue.

Histologically, these lesions are fibro-osseous in character. The predominant cell is a bland spindle cell (figure, A). Mitotic figures are rare. Admixed in the fibrous background are irregularly shaped osseous islands (figure, B). These islands are similar to those seen in fibrous dysplasia, although there is a much sharper separation from the surrounding spindle cells. The islands of bone are often surrounded by active osteoblasts, referred to as *osteoblastic rimming*, a feature indicative of the diagnosis. Malignant transformation is extremely uncommon.

Suggested reading

- Brannon RB, Fowler CB. Benign fibro-osseous lesions: A review of current concepts. *Adv Anat Pathol* 2001;8:126-43.
Regezi JA. Odontogenic cysts, odontogenic tumors, fibroosseous, and giant cell lesions of the jaws. *Mod Pathol* 2002;15:331-41.