

Osteoma in the Oral Cavity of a Pig (*Sus scrofa*)

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A 3-year-old Yorkshire-Hampshire crossbreed sow (*Sus scrofa*) that gradually had been losing weight for a month had an osteoma of the oral cavity. The pig was killed by intravenous administration of T-61 (National Laboratories, Sommerville, N.J.) and necropsied immediately.

The carcase was emaciated (body weight, 60 kilograms). A bony tumour about 15×8×7 centimeters firmly attached to the caudal left side of the hard palate occupied most of the oral cavity. The tumour was covered with epithelium that was ulcerated in some areas. A radiograph of the head in lateral projection showed an opaque mass arising from the bone of the hard palate.

Microscopically the tumour was composed of bony tissue in a stroma of connective tissue and was covered by stratified squamous epithelium with moderate parakeratosis. Lamellated osseous trabeculae were lined by osteoblasts and had haversian channels (fig. 1). Osteoblastic hyperplasia in a few areas was close to immature osteoid tissue (fig. 2). The surface of some trabeculae had osteoclastic activity (fig. 3). Areas of coagulation necrosis with a narrow rim of inflammatory reaction occasionally were seen in the stroma.

The oral tumour was diagnosed as an osteoma based on the presence of mature lamellated bone, osteoblastic activity, and because it was firmly attached to the bone of the hard palate [3]. This tumour was differentiated from "ossifying fibroma", which is common among tumours of the oral cavity. The latter has bone formation as a result of metaplasia and not of neoplastic osteoblastic activity. The metaplastic bone lacks haversian lamellated structures and is never attached to the normal bone [2]. Osteomas are almost entirely restricted to the skull and mandible and have been reported in many animal species, including man [1], but this seems to be the first case described in a pig.

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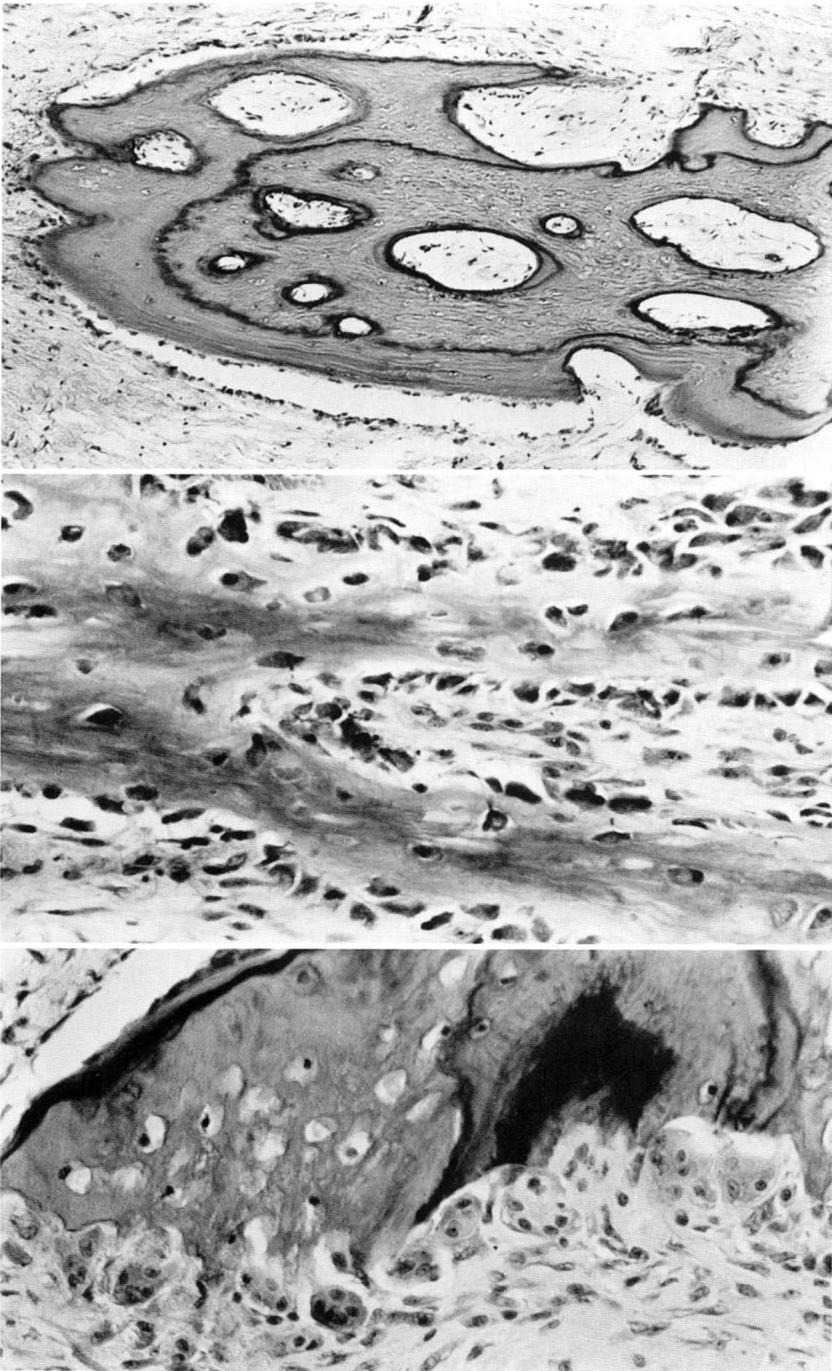


Fig. 1: Micrograph of tumour. Lamellated trabeculae lined by osteoblasts and with haversian channels. HE.

Fig. 2: Osteoblastic hyperplasia surrounding osteoid tissue. HE.

Fig. 3: Surface of bony tissue with osteoclastic activity. HE.

References

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