

FOLLICULAR AMELOBLASTOMA IN A DWARF RABBIT (ORYCTOLAGUS CUNICULUS)

Contributors

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Cytological examination

Giemsa-stained fine needle aspiration (FNA) smears from material obtained from the mass: FNA cytology showed large ovoid or spindle cells mainly arranged in large clusters (figures 1 and 2), small clusters in a fashion reminiscent of multinucleate giant cells (figure 3) or, to a smaller degree, individually, in a background of erythrocytes. Some cells appeared to be forming acinar structures or to be arranged in a palisading fashion. The cells were mildly pleomorphic, although no other features denoting cellular atypia were present. No mitotic figures were observed.

Interpretation of cytological findings

Assuming the material sampled was representative of the mass, the cytological features observed, particularly the fact that the cells were mainly arranged in clusters or forming acinar structures, were indicative of neoplasia of epithelial derivation. The lack of inflammatory cells in the smears examined excluded the possibility of inflammation. The cells observed were morphologically similar and therefore belonged to the same cell population. The fact that the cells were mildly pleomorphic, without other features denoting cellular atypia, such as mitotic figures, made the diagnosis of a benign epithelial neoplasia more likely.

Treatment

Biopsy was suggested but the owner refused. Force-feeding, antibiotics and non-steroid inflammatory agents were administered.

Outcome

On re-assessment a month later, the symptoms had increased in severity, the mass was painful, extended into the oral cavity and was now protruding from the mandibular symphysis displacing the lower incisors. The rabbit was not tolerant to force-feeding and the owner opted for euthanasia.

Histopathology

Following necropsy (Figure 4), histological examination of the mass revealed the presence of a low to moderate grade ameloblastoma (Figures 5 and 6). Loose or dense sheets of cells, either large and spindle or morphologically reminiscent of the stellate reticulum of the enamel organ, were surrounded by a single pseudostratified layer of columnar or cuboidal cells resembling enamel epithelium, forming discrete lobules or islands. Despite being well-differentiated, the tumour invaded and destroyed the bone. Cyst formation was noted. Periportal hepatitis was also observed.

Definitive diagnosis

Follicular ameloblastoma.

Comment

Tumours of dental tissues are rare, excluding canine acanthomatous ameloblastoma/epulis and fibromatous epulis of periodontal ligament origin. To our knowledge, this tumour entity has not been reported in this species before. The cytological features of ameloblastoma observed, although consistent with the histological findings and the definitive diagnosis provided by histology, are by no means definitive as there are several cytological mimics when evaluating any jaw lesion.



Fig. 4

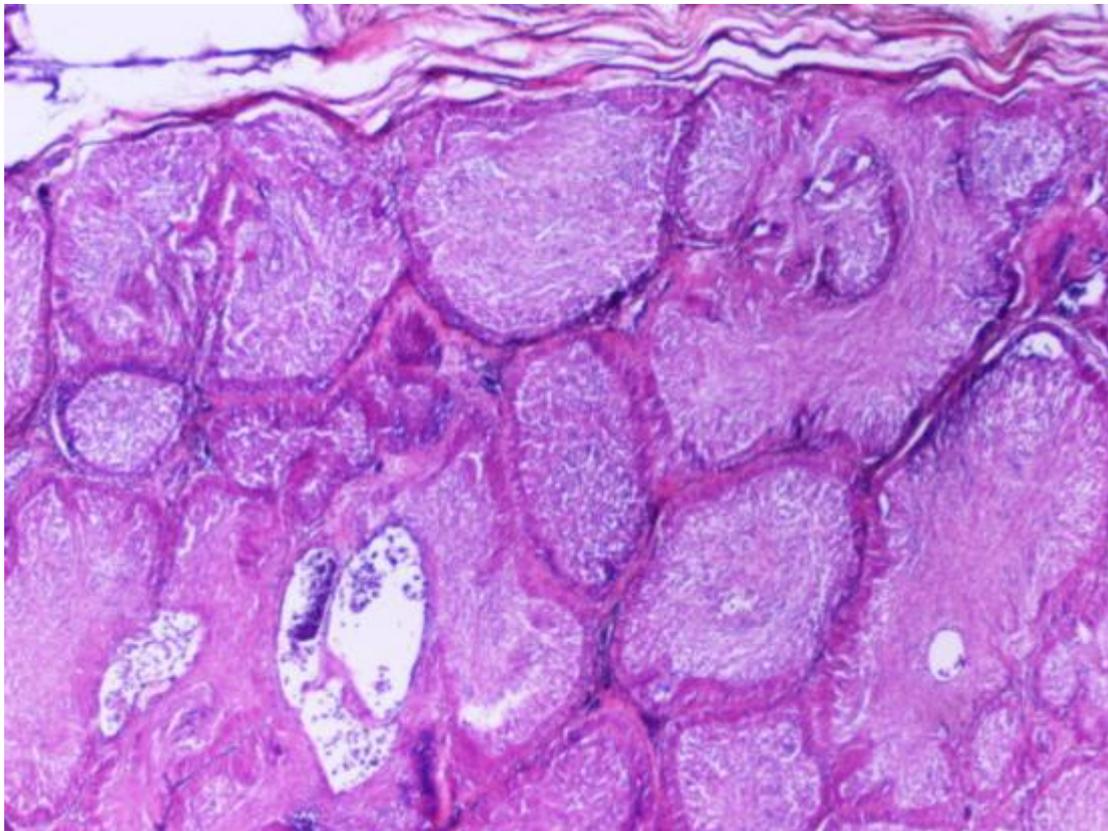


Fig. 5

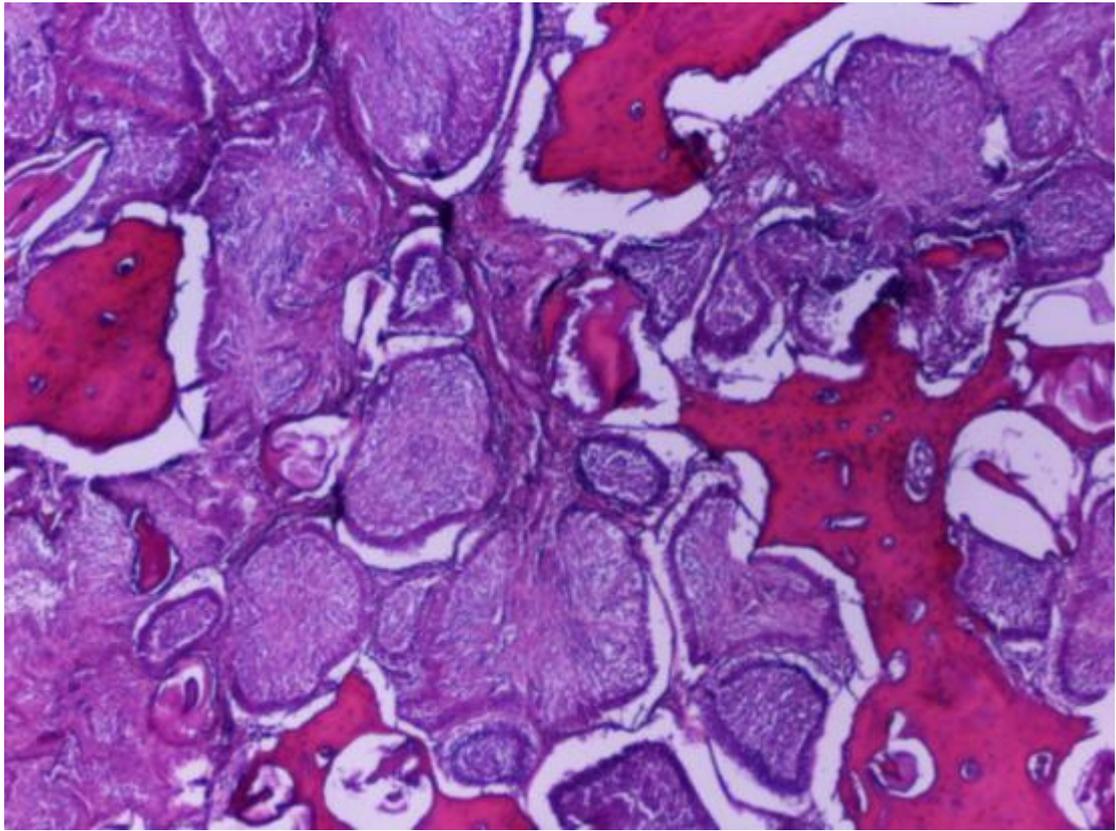


Fig. 6