

## Computed tomographic appearance of sinus pneumocele in two horses

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Pneumocele is a rare slow-growing paranasal sinus expansion reported in humans and horses associated with bone thinning or erosion of the sinus walls.<sup>2,3</sup> The rarity of the condition and the paucity of reports in horses give relevance to the knowledge of its imaging features. This poster describes the computed tomography (CT) appearance of a sinus pneumocele in two horses. Two 15-year-old equids, a pony mare (Case 1) and a Selle Français gelding (Case 2), were presented for CT investigation of a firm progressive left-sided facial swelling (maxillary in Case 1, orbital in Case 2). In Case 2, there was an associated ipsilateral epiphora. CT identified an expansile sinus deformity (maxillary in Case 1, conchofrontal in Case 2) with lateral displacement, irregular thinning, and scalloping of the lateral bony sinus wall. There were thin supernumerary sinus septa. The lacrimal canal was deviated medially. No mass was present and nasmaxillary opening was pervious. Histopathology performed in Case 1 identified bone lysis, granulation tissue, and a flat epithelium overlying the normal respiratory sinus epithelium. Aetiopathogenesis of sinus pneumocele remains obscure. In humans, several causes have been proposed, including a one-way valve mechanism with air-flow obstruction, trauma, and drainage of mucocele.<sup>1,3</sup> No sinonasal obstruction was identified in the two cases, though additional septa may have caused partial sinus compartmentalisation. Spontaneous drainage of a sinus mucocele has been proposed to explain a pneumocele in an equine case report with histopathological findings similar to Case 1.<sup>2</sup>

### REFERENCES

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