
What Is Your Diagnosis?

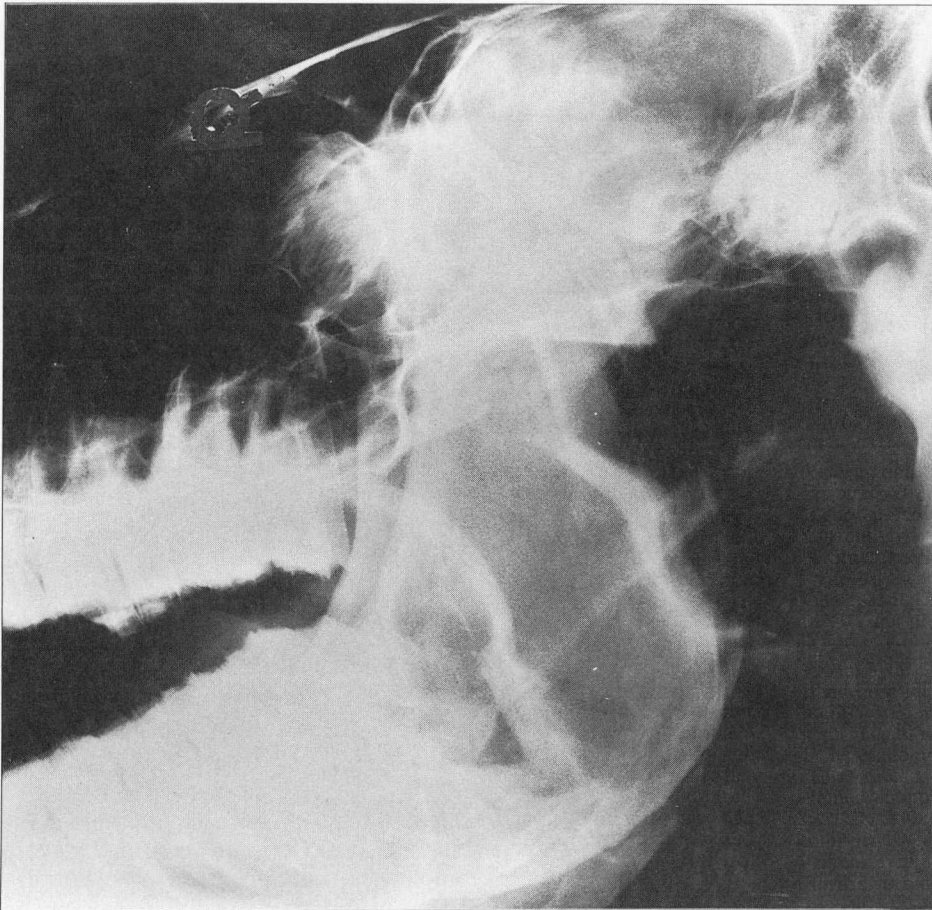


Figure 1—Lateral radiographic view of the head of a horse that was unable to close its mouth after its mandible was caught in a fence.

History

A 20-year-old American Saddlebred gelding was examined because of inability to close its mouth after its mandible was caught in a fence. The mandible protruded forward, there was severe retrobulbar swelling and exophthalmos of the right

eye. Ophthalmic examination revealed the right eye to be blind. Radiographs of the head were obtained (Fig 1).

Make your diagnosis from Figure 1—then turn the page ►

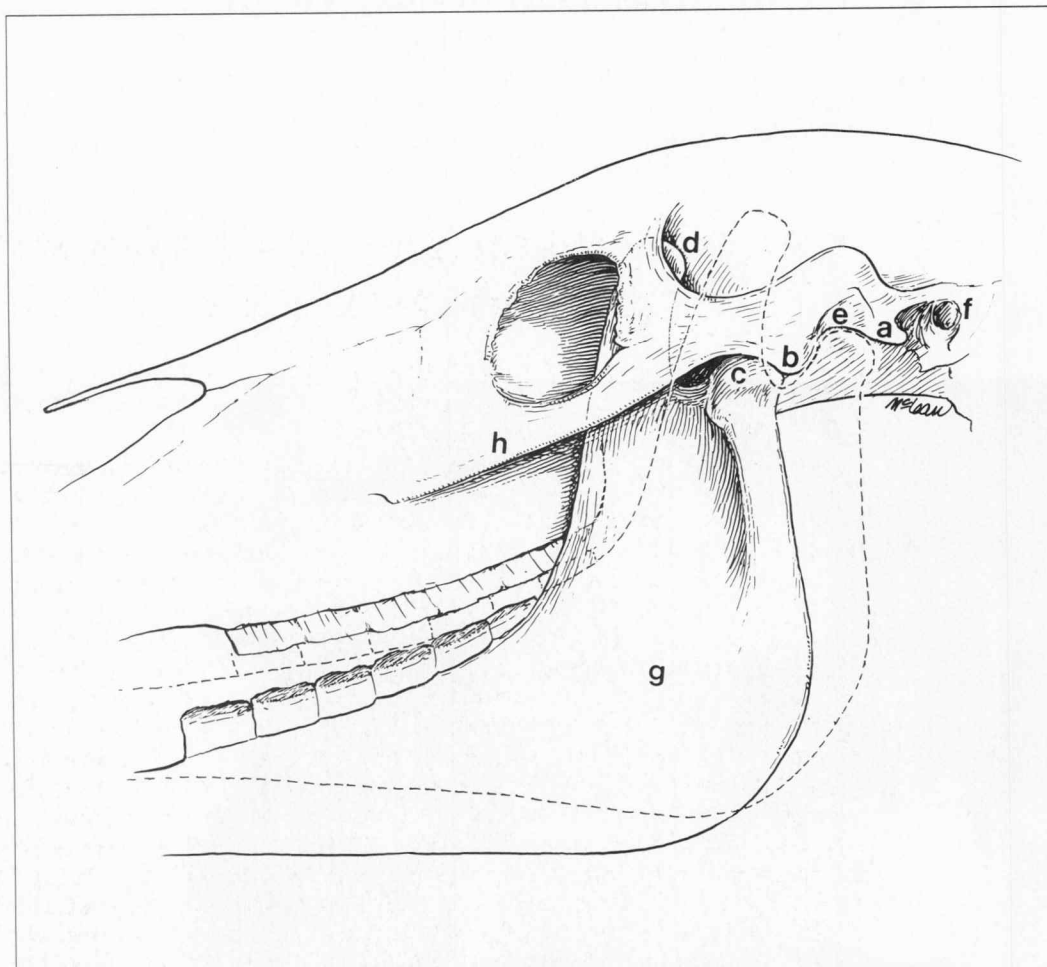


Figure 2—Line drawing of the radiograph in Figure 1, illustrating the temporomandibular luxation: a = retroarticular process, b = articular tubercle of temporal bone, c = condylar process of mandible, d = coronoid process of mandible, e = mandibular fossa of squamous part of temporal bone, f = osseous external acoustic meatus, g = ramus of mandible, and h = facial crest. Dotted line represents normal anatomic position.

Here Is the Diagnosis

Radiologic diagnosis—Rostral luxation of the right temporomandibular joint.

Comments—On the lateral left-to-right projection, the retroarticular process is more visible than normal, the distance between the condylar process of the mandible and the petrous part of the temporal bone is greater than normal, the condylar process is resting on the articular tubercle instead of in the mandibular fossa, and the coronoid process is at the level of the caudal rim of the orbit. Rostral displacement of the lower molar arcade is apparent by the point of apposition with the upper arcade (Fig 2). Additional radiographic findings include an open mouth, dorsal displacement of the soft palate, and irregularity of the occlusal surfaces of the cheek teeth (wave mouth).

The horse was anesthetized and the luxation was corrected by placing a small metal mouth gag between the right molars for leverage, followed by

application of pressure on both maxillae and mandibles at the incisors to close the mouth. Recovery was uncomplicated, and the horse was able to prehend and masticate food normally thereafter. The right eye remained blind.

Temporomandibular joint luxation in horses is rare, and is the result of a downward and forward traction on the mandible.¹ Inability to close the mouth follows. In this case, the severe retrobulbar swelling may also have resulted in optic nerve damage. If there are no associated fractures, the prognosis for recovery is usually good.¹

1. Cook, WR. Skeletal radiology of the equine head. *J Am Vet Radiol Soc* 1970;11:35-55.

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