
Omar Maher, DV; Melinda H. MacDonald, DVM, PhD, Diplomate ACVS; Monica Aleman, MVZ, PhD, Diplomate ACVIM; Hugo Hilton, BVSc; and Sarah M. Puchalski, DVM, Diplomate ACVR

Temporohyoid osteoarthropathy most often affects horses bilaterally. Both ceratohyoid ostectomy and stylohyoid ostectomy are effective treatments. Authors' address: Veterinary Medical Teaching Hospital, School of Veterinary Medicine, University of California, Davis, CA 95616; e-mail: omaher@newenglandequine.com. © 2008 AAEP.

1. Introduction

Temporohyoid osteoarthropathy (THO) is a disorder of the petrous-temporal and stylohyoid bones. Common clinical signs include facial and vestibulocochlear nerve dysfunction and head tossing, and less common signs include dysphagia and seizures.

Diagnosis is based on clinical signs, guttural pouch endoscopy, skull radiographs, and computed tomography (CT).

Horses can be managed medically and/or surgically. Surgical management using partial stylohyoid ostectomy (SHPO) or a ceratohyoid ostectomy (CHO) aims to reduce stress on the temporohyoid joint to stop the progression of signs.

The objectives of the study are to report clinical presentation and outcome after surgery in horses with THO.

2. Materials and Methods

Medical records of surgically managed THO horses between 1993 and 2008 were searched.

3. Results

Twenty-four horses were identified (11 SHPO and 13 CHO). Common clinical signs included facial nerve paralysis, unilateral corneal ulceration, ataxia, and head tilt. Horses had radiographs (24), guttural pouch endoscopy (22), and CT (16). Each modality identified abnormalities in all horses. CT identified additional abnormalities in 62% of the horses, and it showed bilateral THO in 94% of the horses.

Post-operative complications included the need for an emergency tracheotomy, the worsening of neurological signs, and epistaxis. Survival rate at discharge was 96%. One horse was euthanized after a severe worsening of neurological signs.

At 1-yr post-surgery, 89% of horses with CHO and 87% of horses with SHPO were substantially improved. Most of the improvement occurred within the first 6 mo. Fifty-percent of horses in which long-term follow-up was available returned to athletic activities.
4. Discussion
Both surgical techniques were successful in stopping and reversing the progression of the neurological signs of THO in most horses.

References