CASE PRESENTATION

A 16-year-old barrel racing quarter horse mare was admitted on an emergency basis with a lacerated tongue. The mare had been acutely dysphagic earlier that day, and the lacerated tongue was noted by the owner. At presentation, the mare was bright and alert. Oral evaluation revealed a swollen necrotic tongue with a transverse, nearly full-thickness laceration near the rostral attachment of the frenulum (A). No other abnormalities were noted during the physical examination. The mare’s tetanus vaccination status was current. Results of hematologic testing and a serum chemistry profile were within the normal reference ranges.

1. What treatment options are available for tongue lacerations?
2. What is the preferred treatment in this case and why?
3. What is the prognosis for normal feed intake with this injury?
4. How likely is the mare to return to barrel racing?

(See page 68 for answers and explanations.)
Because of the extensive blood supply of the tongue, it has an excellent healing capacity. Most tongue lacerations are amenable to surgical repair. Partial dehiscence followed by repeat surgery is a common scenario. However, long-term functional and cosmetic outcome is generally excellent. Small lacerations can be left to heal by second intention, using only mild antiseptic mouthwash rinse. Loss of blood supply is an indication for tongue amputation with removal of all nonviable tissue.

In this case, the entire free portion of the tongue was nonviable with a necrotic appearance and odor. Thus partial tongue amputation was indicated and performed. The clear line of demarcation between viable and necrotic tissue facilitated accurate resection, sparing removal of healthy tissue. After resection of the necrotic portion, the stump was lightly debrided to expose healthy bleeding tissue. The tongue muscle was sutured using a horizontal mattress pattern to eliminate dead space, and the dorsal and ventral mucosal surfaces were apposed using vertical mattress and simple interrupted sutures.

Horses that have undergone partial tongue amputation have a good prognosis for complete recovery and normal feeding habits. Even with extensive resection of the tongue, the mare returned to normal feed intake shortly after surgery and did not lose weight thereafter. Three years after surgery, the mare in this case was doing well and the tongue stump appeared healthy, showed minimal scarring, and was functional.

There is only limited information in the current literature regarding the potential of an athletic horse to regain activity after tongue amputation. Return to athletic activity after partial tongue amputation depends on the type of bit used because some types may irritate the stump. The mare in this case was used for barrel racing without a bit before the injury; thus no bit adjustments were necessary. After complete healing, the mare returned to barrel racing and performed as well as before the injury.

REFERENCES