

## Medical and surgical management of a case of chronic mastitis in a mare

L.M. Benningfield, R.R. Wilborn, A.K. Johnson, R.L. Jensen, L.H. Boone

College of Veterinary Medicine, Auburn University, Auburn, AL

A 9-year old American Paint mare was presented with an enlarged right mammary gland of greater than one year's duration. The owner reported that the mare had been lactating since her last foaling three years previously. During examination, a thick cream-colored substance was expressed from the right mammary gland. Culture and Gram stain were negative for bacteria but a large number of degenerative neutrophils were present on cytology. The mare was diagnosed with galactorrhea and mastitis. Treatment was initiated with daily milk removal and instillation of intramammary ceftiofur (Spectra-Mast®) for four days. The mare responded to treatment with resolution of mammary enlargement. Nine months later, the mare returned with a large plaque of ventral edema. Ultrasonography of the ventral abdomen revealed enlarged inguinal lymph nodes and fluid accumulation with diverse echogenicity within the mammary gland. Cytology of fluid from the mammary gland showed suppurative inflammation and bacterial culture revealed *Nocardia* organisms. Bilateral mastectomy was performed under general anesthesia due to the history of chronic mastitis and failure of medical management alone. An hourglass-shaped incision was made, and blunt dissection was used to separate the gland at the body wall. Postoperative care included systemic antibiotics, flunixin meglumine, and hydrotherapy. Despite careful management, complete dehiscence occurred seven days later and the wound healed via second intention. At recheck examination seven weeks later, the surgical site was free of drainage and healing was adequate. This case documents an atypical case of mastitis in a mare. Generally, mammary gland problems in the mare are uncommon.<sup>1</sup> The most common signs are swelling, heat and ventral edema, and the most common organisms isolated are *Streptococcus spp.*<sup>2,3</sup> Cytology and bacteriological testing are recommended to rule out other causes, such as trauma and neoplasia.<sup>4</sup> Medical management may include milking, intramammary or systemic antibiotics, hydrotherapy, or surgical excision as a last resort.

**Keywords:** Equine, galactorrhea, mastectomy, mastitis

### References

1. McGladdery AJ: Differential diagnoses and treatment of diseases of the equine mammary gland. *Equine Vet Educ* 1998;21:266-268.
2. McCue PM, Wilson WD: Equine mastitis- A review of 28 cases. *Equine Vet J* 1989;21:351-353.
3. Smiet E, Grinwis GC, van den Top JG, et al: Equine mammary gland disease with a focus on botryomycosis: a review and case study. *Equine Vet Educ* 2012;24:357-366.
4. Brendemuehl JP: Mammary gland enlargement in the mare. *Equine Vet Educ* 2008;20:8-9.