Corynebacterium pseudotuberculosis Infection as an Unusual Cause of Lameness in 35 Horses (1999–2009)

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Corynebacterium pseudotuberculosis infection of the limbs often results in severe lameness but carries a favorable prognosis. Authors’ addresses: William R. Pritchard Veterinary Medical Teaching Hospital (Nogradi), Department of Medicine and Epidemiology (Spier, Toth), and Department of Surgical and Radiological Sciences (Vaughan), School of Veterinary Medicine, University of California, One Shields Avenue, Davis, California 95616; e-mail: sjspier@ucdavis.edu. †Corresponding author. © 2010 AAEP.

1. Introduction
Horses with Corynebacterium pseudotuberculosis infection typically have one or more abscesses in the pectoral or ventral abdominal regions. Less commonly, involvement of the limbs may occur, because of infection deep within musculoskeletal structures (including muscle, tendon, bone, and joint) or ulcerative lymphangitis. The purpose of this study was to describe the clinical course and outcome in horses where C. pseudotuberculosis infection was associated with musculoskeletal disease and lameness.

2. Materials and Methods
Clinical and clinicopathological data were collected from 35 horses diagnosed with lameness associated with C. pseudotuberculosis infection between 1999 and 2009. Data were collected from sample populations of horses with the classical external form of the disease and horses with internal abscessation for statistical comparison.

3. Results
Thirty-two horses (91.5%) showed grade 4/5 lameness. Three horses (8.5%) showed grade 5/5 lameness. Abscesses were diagnosed by clinical signs and/or ultrasonographic examination. Abscesses were located in the axillary or triceps region in 25 horses (71.4%), the stifle region in 2 horses (5.8%), and the popliteal lymph node in 1 horse (2.9%). Diffuse lymphangitis was seen in four horses (11.6%), osteomyelitis was seen in two horses (5.8%), and septic arthritis was seen in two horses (5.8%). Horses with the musculoskeletal form of C. pseudotuberculosis infection had a significantly lower packed cell volume (PCV).

4. Discussion
Horses with C. pseudotuberculosis infection of the musculoskeletal system can present as a diagnostic challenge. Blood work findings consistent with inflammation are non-specific. Ultrasound is a very sensitive tool to localize the lesion.