Mycobacterium intracellulare isolation from equine fetal membranes
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Mycobacterium sp. is classified as a zoonotic pathogen; the most recognizable of which are tuberculosis and leprosy. The most documented equine cases of Mycobacterium sp. infections present as granulomatous enteritis and colitis.\textsuperscript{1} The non-tuberculosis forms of Mycobacterium avium complex (MAC) result from a slow-growing bacillus that is ubiquitous in the environment. The postulated route of transmission of MAC from animal sources to humans is by inhalation, ingestion or the percutaneous route.\textsuperscript{2} MAC has been implicated as a cause of equine abortion; however, subspeciation was not performed in those cases.\textsuperscript{3,4}

A pluriparous 15 year old Anglo-Arab mare foaled a full-term (344 days) filly on October 6, 2010, without assistance. Gross examination of the membranes revealed a weight of 3.6 kg, with a brown, viscous plaque adherent in a five cm diameter area of the uterine body. Differential diagnosis included a Nocardia-type placentitis, which frequently manifests as a thickened uterine body region overlain with mucoid exudate. Ziehl-Neelsen staining of a direct smear of the lesion revealed a considerable number of gram positive, acid-fast bacilli. A sample was submitted for analysis to the Queensland Mycobacterium Reference Laboratory. The Mycobacterial species determination was performed using a 16S sequencing procedure, leading to identification of M. intracellulare.

This case of M. intracellulare reiterates the necessity of biosecurity procedures when handling fetal membranes. The novelty regarding the diagnosis of Mycobacterium intracellulare placentitis is that infection has not previously been reported after delivery of a viable foal.

Keywords: Mycobacterium intracellulare, equine, fetal membranes, placentitis, MAC

References