ULTRASONOGRAPHIC FINDINGS IN HORSES WITH FOOT PAIN BUT WITHOUT RADIOGRAPHIC BONE ABNORMALITIES

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Topic: Imaging

Purpose of the work. Foot pain is a common cause of lameness in horses. When horses with foot pain have no radiographic abnormalities, soft tissue assessment remains a diagnostic challenge without magnetic resonance imaging (MRI).

The purpose of this study was to retrospectively review ultrasonographic (US) findings in the front feet in a series of clinical cases with lameness responding positively to anesthesia of the palmar digital nerves but without radiographic bone abnormalities.

Materials and used methods. Medical records of horses that underwent a complete US examination of the digit were collected. History, clinical findings, radiographic and US results were retrospectively reviewed.

Outcomes. The records of 39 horses satisfied the inclusion criteria. Thirty of the 39 horses had lesions affecting the deep digital flexor tendon (DDFT), 27 horses had abnormalities in the distal interphalangeal joint of which 6 had a visible abnormality in one collateral ligament. Distension of the podotrochlear bursa was seen in 22 horses and abnormalities in the ligaments of the navicular bone were detected in 2 horses. Irregularity of the navicular bone flexor surface was found in 8 horses. In only 3 of the 39 horses the DDFT was the only structure affected. The other 36 horses had US abnormalities in more than one anatomical structure.

Conclusions. US diagnosis of soft tissue damage in the foot was possible in cases where radiographic diagnosis was unsuccessful. Ultrasonography offers an easily available diagnostic tool for an evaluation of the digital soft tissues when MRI is not possible because of availability or financial constraints.

Bibliography

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