

PRELIMINARY STUDY OF THE ULTRASONOGRAPHY DIAGNOSIS OF TENDINITIS IN HORSES

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SUMMARY : Diagnostic real time ultrasound scanning offered the ability to evaluate the horses tendons and visualize their anatomy and pathology .

INTRODUCTION

Ultrasound is based on the principle of high frequency sound waves that are produced by electrical stimulation of piezoelectric crystals . These pressure waves are propagated through tissues and a portion of the sound is reflected (echoed) back to the transducer , converted to electrical impulses and displayed on the screen as moving images . The level of intensity of the reflected portion of the sound depends on the difference in the acoustic impedance between the adjacent structures . The terms hyperechoic (high intensity) , hypoechoic (low intensity) and anechoic (no reflection) are used to describe these densities (Pipers 1982) .

Ultrasound has become a valuable diagnostic tool for the equine practitioners . Many workers have also reported on the efficacy of ultrasound for pregnancy detection in mares (Torbeck and Rantanen 1982 ; Pipers et al ., 1984 ; Allen and Goddard, 1984) . Others have reported on visualization of pathological lesions in legs , joints and some internal organs (Rantanen and Ewig, 1981 ; Rantanen 1982 ; Dik et al , 1991) .

Injuries of the flexor tendons are frequently met in horses performing at higher intensity such as races or fast sports . The most common clinical signs in such injuries are swelling of the affected tendon and the surrounding soft tissues , local heat and sensitivity on palpation . Lameness often occurs especially in acute stages .

The aim of this study was to demonstrate the changes in the sonographic appearance of the damaged tendinous structures .

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