Standardize procedure to obtain histological slides from suspensory ligament (M. interosseous III) from the pelvic limbs on horses

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Lameness on the horse represent an important economic loss between 46% and 53% injuries are from tendons and ligaments, that is why the importance of studying the morphological changes on these anatomical structures of the limbs with histological slides. The aim of this study is to standardize a protocol for optimal histological processing of the proximal third of the suspensory ligament (SL) in healthy horses to obtain diagnostic images from the slides. We performed five longitudinal cuts on different parts of the proximal third of the SL, 0.5 cm about this were fixated by immersion the SL in different fixating solutions at different concentrations and periods of times and then they will be immersed in paraffin wax and cut with the microtome until good quality and diagnostic images are achieved and we were able to differentiate histological structures of the SL. We compare anatomical characteristics on the histological slides resulting from the different fixation techniques used and determined which one is the best fixating option for obtaining diagnostic images from the SL samples. Resulting that 10% buffered formalin for 24 hours and then immersed in PBS solution for another 24 hours was the best fixating option. The problem of processing SL samples is the excessive hardening becoming a problem during microtome cuts, that’s why it is so important to have a standardized technique for processing SL for histopathology studies and be able to obtain diagnostic images.

Biography
Ignacio Perez Ortiz has obtained his MVZ degree from Facultad de MedicinaVeterinaria y Zootecnia UNAM. He has completed his Externship in the Equine Hospital FMVZ-UNAM.

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