7. Summary

Injection of Ringer solution into the navicular bursa for the diagnosis of the navicular syndrome in horses: An experimental study

This study is about the puncture of the navicular bursa at the limbs of slaughtered horses in the view of the podotrochlear syndrome. These investigations are carried, to gain extra Imformations about the safe positioning of the puncture of the navicular bursa.

Depending on breed, age and weight of the horses, the sizes and shapes of the hooves differ significantly. The injection-method described in this study has prooved to be very reliable and applicable to all hoof shapes (pointed, regular, edgeless) and sizes (small, medium, large).

On different hoof sizes of legs from slaughtered horses, the necessary penetration depth for injections into the navicular bursa has been determined (between 4.6 to 5.5 cm). This injection-technique, with its determination of the appropriate cannula size and depth of penetration, allows a high reliability in the punctuation of the navicular bursa.

The results of this study can be used as basis for further research conducted with living horses. Another finding of this study is the fact that aspiration of synovia from the navicular bursa is not possible.

The mess of fluence that can be injected in to the navicular bursa varies from limb to limb (between 1 to 10 ml).

The pressure measuring instrument used for the aforementioned experiments can be used to help positioning the cannule. The technique for a reliable punctuation of the navicular bursa as described above is well applicable in practice.

The results of this study show that the pressure in the navicular bursa falls with the time at zero.

In this study it can be observed that the strength of the load has no meaningsful consequence on the pressure ratio in the navicular bursa.

The pressure in the navicular bursa reises when fluids are reised. Limbs with a deformed Canales sesamoidales do not have a higher bursapressure than limbs without a deformed Canales sesamoidales.