

7. Summary

Occurrence and significance of an insertion desmopathy of the Ligamentum nuchae of horses with back problems – a clinical and radiological study

The present study examines whether or not radiological changes within the meaning of an insertion desmopathy of the Ligamentum nuchae at the Squama occipitalis can lead to back problems. To clarify the subject, the clinical and radiological results of 180 horses are compared. 90 horses were presented as spine patients and 90 horses served as control group. The clinical examination includes the registration of the case history, the examination of the movements and a palpation of the neck and vertebral spines. Moreover, radiographs of neck and vertebral spines from third thoracic spine to approximately fifth vertebral spine of the lumbar column are made. The radiological findings are measured and compared to the clinical and case history results. The most frequent symptoms mentioned at the preliminary report are: Being stiff, problems with bending and up-and-down-movements with the head. Within the clinical examination following four symptoms are most frequently observed: when running on a circle, the horse turns its head outwards, it shows a poor ground cover in gallop or changes the gallop often and shows spiritless movements.

The evaluation of the examination leads to the following results:

- The horses of the present study, that have a back problem, show more often severe changes in the meaning of an insertion desmopathy of the Lig. nuchae at the Os occipitale than the horses of the control group.
- The horses with back problems show skeletal vertebral spine changes more often than the horses of the control group.
- The number of horses with back problems, which have no radiological changes at the Os occipitale is smaller than the number of horses without radiological changes at the vertebral spines.
- The observation of symptoms that are typical for horses with back problems corresponds often with changes in the meaning of an insertion desmopathy of the Lig. nuchae at the Os occipitale.
- The horses that show the typical symptoms for horses with back problems often do not indicate a connection between the clinical results and radiological changes of the vertebral spines.