

## **5. Summary**

### **The development of hoof care and horse shoeing from ancient times until today in particular consideration of shoeing for laminitis treatment / in laminitis / of laminitis shoeing.**

During domestication of the horse and its utilization for riding, carrying and towing, their feet were exposed to excessive loads. For Protection of excessive horn capsular abrasion nailed horse shoeing has been developed by different cultures in between 6<sup>th</sup> and 10<sup>th</sup> century AD. The development of shoes for particular purposes, for correction of mal- positioned limbs and the treatment of foot diseases and lameness occurred first in the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century.

This investigation is targeting the shoes for laminitis treatment of this time period in particular. It is based on the analysis of the horse shoe collection of the former veterinary medical school of the Humboldt- University in Berlin- Mitte. All horse shoes presented in this location were photographed and analysed.

Moreover, these horse shoes were compared to those of the exhibitions at the veterinary schools in Vienna and Leipzig as well as to the collection of the Hohenheim University museum.

Until today there is no optimal therapy for laminitis despite enormous increase of knowledge. Analogically there is no optimal orthopaedic treatment available.

The forces applied to the foot suspensory must be reduces to prevent dislocation of the pedal bone and to decrease further progress of the disease. Heel elevation is recommended to load sound areas of the foot and to decrease load of the diseased areas. The traction of the deep digital flexor tendon is reduced as well. In chronic laminitis the shoeing should ease the break-over and extend the foot carefully. The damageable sole must be protected from trauma in any case.

Ten specific laminitis shoes are located in the collection of the former veterinary medical school in Berlin- Mitte. Concerning different types of shoeing Berlin has the most comprehensive collection of all four locations. Compared to today's laminitis shoeing the old shoes are still adequate. The pros and cons of the exhibited laminitis shoes are weighed differently. To a greater or lesser extend the shoes satisfy the demand to load the healthy parts of the foot, hence to reduce load on diseased parts, to protect the sole and to reduce traction of the deep digital flexor tendon. At the time no consideration was given to the focalisation of break-over in the examined shoeings.