

## 7. Summary

### **Special radiographic structural analysis (Fein-Fokus-Methode) of dissections from fetlock and tarsocrural joints of horses.**

The literature gives a view about synonymous expressions to dissections, the occurrence, localisation, etiology and pathogenesis as well as about pathologic-anatomic studies and radiograph descriptions of different structures.

The own study is based upon 41 fetlock- and 54 hockjoints. A histologic control is made from all shadows seen in the Fein-Fokus-Radiograph picture. All dissections are analysed to their proportionality of soft, spongy and sclerotic parts-shadows. The description of these different structures is not a problem for Fein-Fokus-System, if the dissections are enlarged six times. The composition and the difference in size of the dissections are shown, some smaller groups are inspected.

A connection of the horse race, the sex of the horse, the joint and the localisation in the joint is not found. Dissections in fetlock joints were found at trotters, warmblooded horses, thoroughbred horses and other races whereas in tarsocrural joints they are found only in trotters and warmblooded horses.

14 % of the fetlock dissections and 25 % of the tarsocrural joint dissections show sclerotic areas in the Fein-Fokus-Radiograph examination. There is a tendency, that sclerotic dissections of older horses have a higher grade of sclerotic but there is no connection with race and sex of horses with either joint and localisation in the joint. The trend of a higher sclerotic grade in older horses is described with exceptions for fetlock joint as well as for tarsocrural joints, but there are not enough sclerotic dissections (only 20) to do a statistical analysis. So only a trend is shown. The sclerotic dissections are bigger in size than the dissections with spongy character.

There was no relation to race, sex, joint or localisation in the joint.

The dissections with spongy character don't show connections in all above given parameters. Neither in size nor in composition of the dissections there was a trend for references.

Dissections that were free in the joint, "Free bodies", only were found in 6 of 95 joints, all 6 dissections are from fetlock joints. Even here there were no references to above mentioned parameters. Referring to the total size it is remarkable that these "free bodies" are smaller than the total size of all dissections from fetlock joints.

The synovial samples showed, in the number of cells (white blood cells) as in total protein a non-inflammatory character.