

11 Summary

Kinscher, Stefanie (2007): Luxatio patellae congenita – Measuring the depth of the trochlea ossis femoris and other parameters through computed tomographie.

The aim of this study was first the determination of data of knee joints of dogs, both those with disease through luxation of the patella and those in good health. Secondly the data were tested whether it could objectively prove the existence of a luxation of the patella.

For this purpose 89 knee joints from 46 dogs of different breed, age and sex were analysed.

Before starting examination the limbs were classified according to PUTNAM (1968) into their different clinical degrees of patella luxation. 16 dogs out of the total of 46 showed unilateral and 6 dogs a bilateral luxation of the patella. All animals in this study were allocated to different groups, sorted by sex and weight. Within these groups a comparison of the values determined was performed and differentiated into luxated limbs and limbs without luxation. Through computed tomography every limb was analysed in axial layers followed by detailed measuring of the knee joints. This comprised measuring the depth of the trochlea ossis femoris, the angle of congruence, furthermore depth, width and length of the patella and the depth of the trochlea as an area. The measurements were followed by mathematical analysis in forming ratios of depth of trochlea and depth of patella, depth of trochlea and width of patella as well as length of patella and angle of congruence, finally also depth of trochlea as an area and depth of patella.

This comparison did not reveal significant differences between dogs with luxation and those without, neither in the comparison by weight nor the comparison by sex. This consequently leads to the conclusion that solely measuring individual parameters does not allow any evidence about a luxation of the patella and cannot substitute a clinical check.