*Original Article*

# Suture attachment sites on stifle joint of small and large dog breeds for cranial cruciate ligament rupture repair

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*Abstract*

Cranial cruciate ligament rupture is one of the most common problems in dogs. Previous studies have arrived at no absolute conclusion regarding suture attachment sites using the extracapsular tecluuique to repair cranial cruciate ligaments in dogs. Therefore, the objective of this study was to identify and compare suture attachment sites on the femur and tibia between small and large dog breeds at different stifle angles. Twenty-seven cadaveric hind limbs of small dogs and 16 cadaveric limbs of large dogs were collected, and lateral photographs were taken at different stifle angles (including 40, 60, 80, 100, 120, 140, and 160 degrees). Based on anatomical landmarks, three points were marked on the femur and five points were marked on the tibia. Distances between the center of points on the femur and tibia at different angles were measured in millimeters with a picture analysis program. The minimum change in distance at the different angles was the most isometric distance. The most isometric distance was identified in small and large dogs between the lateral condyle of the distal femur cranial to the middle part of the lateral fabella and the caudal part of the tibial tuberosity. According to the study, the most isometric distance is recommended to be used for cranial cruciate ligament repair.

Keywords: cranial cruciate ligament rupture, dogs, extracapsular technique, isometric distance

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