NOR CAL VETERINARY SURGICAL



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STIFLE RADIOGRAPH TECHNIQUE

STANDARD STIFLE RADIOGRAPHS FOR BOTH TPLO AND TTA TECHNIQUES REQUIRE A
SEDATED PATIENT FOR APPROPRIATE POSITIONING (THIS ALSO ALLOWS FOR REDUCTION IN
STAFF EXPOSURE BY ALLOWING RADIOGRAPHS TO BE OBTAINED WITHOUT HOLDING THE
PATIENT IN POSITION)

• SEDATION

- O ACCEPTABLE RADIOGRAPHIC POSITIONING MAY BE OBTAINED USING ANY OF THE FOLLOWING PROTOCOLS:
- O DEXMEDETOMIDINE/BUTORPHANOL SEDATION
 - DEXMEDETOMIDINE 0.005MG/KG IV
 - BUTORPHANOL O. 1 MG/KG IV
- O ACEPROMAZINE/BUTORPHANOL SEDATION
 - ACEPROMAZINE 0.02MG/KG IV/IM/SQ
 - BUTORPHANOL O.1 MG/KG IV/IM/SQ
- O GENERAL/INHALANT ANESTHESIA

Positioning

- LATERAL STIFLE RADIOGRAPH (FIGURE 1)
 - POSITION THE ANIMAL IN LATERAL RECUMBENCY WITH THE AFFECTED LIMB DOWN
 - EXTEND THE LIMB SO THAT THE STIFLE IS AT A "STANDING ANGLE" OF ~135 DEGREES
 - A SANDBAG MAY BE PLACED AT THE CRANIAL ASPECT OF THE STIFLE TO KEEP THE LIMB EXTENDED. THE HOCK SHOULD REMAIN IN A NEUTRAL POSITION.
 - NOTE THE BEAM IS CENTERED ON THE STIFLE BUT THE RADIOGRAPH INCLUDES BOTH THE STIFLE AND THE HOCK
 - NOTE THE APPROPRIATE POSITION MARKER
- O CAUDO-CRANIAL (CDCR OR "PA") RADIOGRAPH (FIGURE 2)
 - POSITION THE ANIMAL IN STERNAL RECUMBENCY WITH THE AFFECTED LIMB EXTENDED CAUDALLY
 - ENSURE THE TIBIAL TUBEROSITY IS TOUCHING THE TABLE AND THAT THE POINT OF THE HOCK IS DIRECTED STRAIGHT UP; THE DORSAL ASPECT OF THE PES WILL LIE FLAT ON THE TABLE AND THE PADS WILL POINT STRAIGHT UP
 - A SANDBAG OR FOAM BLOCK MAY BE PLACED UNDER THE CONTRALATERAL STIFLE TO KEEP THE PATIENT BALANCED
 - ADDITIONAL SANDBAGS OR ASSISTANTS MAY BE REQUIRED TO KEEP THE PATIENT IN STERNAL RECUMBENCY
 - A LENGTH OF TAPE MAY BE PLACED ON THE FOOT TO ASSIST IN MAINTAINING LIMB EXTENSION.
 - THE BEAM SHOULD BE CENTERED ON THE STIFLE; THE RADIOGRAPH INCLUDES BOTH THE STIFLE AND THE HOCK (IN FIGURE 2 THE BEAM IS NOT CENTERED ON THE JOINT; THE PATIENT WAS MOVED LATERALLY PRIOR TO THE FILM BEING EXPOSED)
 - NOTE THE APPROPRIATE POSITION MARKER

• RADIOGRAPHIC ASSESSMENT

- O LATERAL STIFLE RADIOGRAPH (FIGURE 3 PREOP; FIGURE 4 POSTOP)
 - NOTE THE FABALLAE ARE SUPERIMPOSED OVER ONE ANOTHER AND THE FEMORAL CONDYLES FORM A SINGLE CONCENTRIC CIRCLE
 - THE TALUS AND CALCANEUS SUPERIMPOSE TO FORM A CONCENTRIC CIRCLE AT THE LEVEL OF THE HOCK
- O CAUDO-CRANIAL RADIOGRAPH (FIGURE 5 PREOP; FIGURE 6 POSTOP)
 - NOTE THE PATELLA IS CENTRAL AND THE FABALLAE ARE EACH BISECTED PERFECTLY BY THE FEMORAL CORTEX
 - THE MEDIAL CORTEX OF THE CALCANEUS EXACTLY BISECTS THE MEDIAL SULCUS OF THE DISTAL TIBIA

FIGURE 1



FIGURE 2



FIGURE 3







