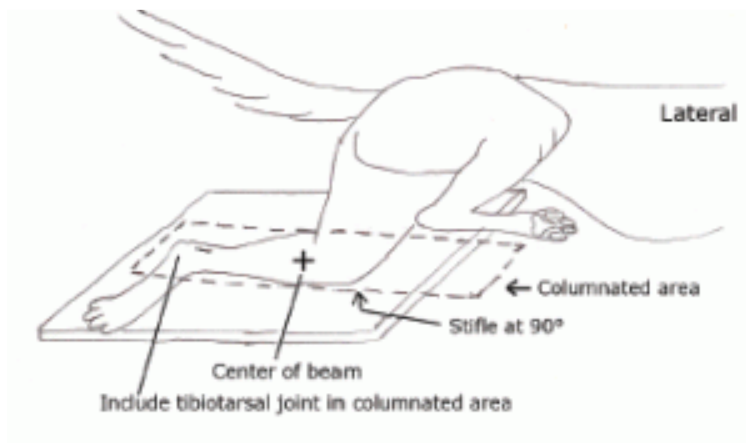


TPLO Planning – how to take good radiographs

Appropriately positioned radiographs are important for pre-surgical planning and post surgical assessment. Taking the correct radiographs prior to surgery avoids repeating the process at surgery which slows down work flow. Whenever cruciate rupture (partial or full) is suspected the following steps should be followed:



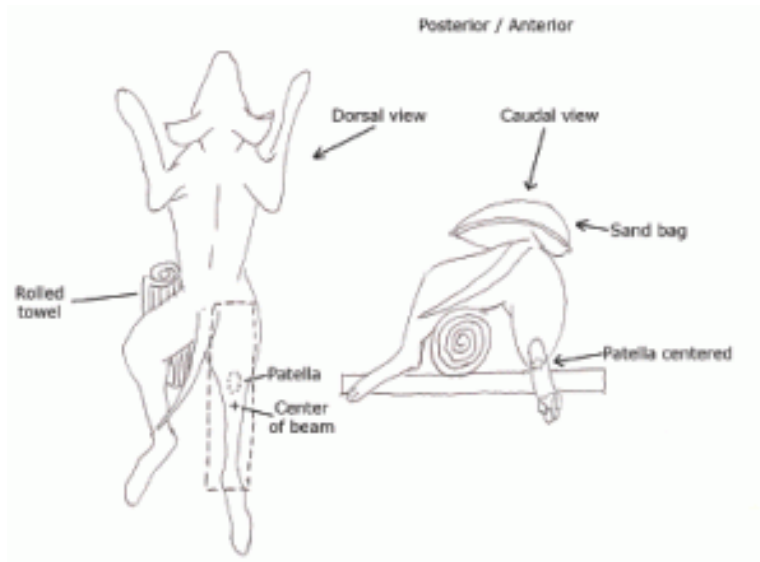
Positioning:

Lateral – the patient is placed in lateral recumbency on the x-ray table.

- The stifle to be radiographed needs to be the down limb.
- The stifle and hock are placed at ninety degrees.
- Centre the X-Ray beam on the proximal, medial tibial – just distal to the stifle joint.
- Collimate to include the tibiotarsal joint
- Bring the upper limb forward and hold with a sand bag. Moving the upper limb too far forward will tend to turn the lower stifle out of position.
- Aim for overlap of the femoral condyles and intercondylar tubercles of the tibia. If it is not possible to get both the femoral condyles and the tibial tubercles to overlap, focus on getting the tibial tubercles overlapping the most.
- A foam wedge can be placed under the stifle or tarsus to help correct rotation and keep the bones parallel to the table

Checklist for a good lateral radiograph:

- ✓ Stifle and hock flexed at 90 degrees
- ✓ Hock and stifle should be within collimated area
- ✓ Superimposition of the medial and lateral intercondylar tubercles = straight image
- ✓ Placement of a calibrated length marker at the height of the proximal tibia on the table



Positioning:

Caudo-cranial – the patient must be placed in sternal recumbency

- Place a foam wedge or rolled towel under the femur of the contralateral limb so it is parallel with the x-ray table
- Extend the limb to be radiographed caudally with the hip and stifle in extension.
- Keep limb and body straight by placing another sandbag or towel in the ipsilateral inguinal region.

Checklist for a straight caudo-cranial radiograph

- ✓ The patella is centred under the femur
- ✓ The fabellae are bisected by the medial and lateral edges of the femur
- ✓ The medial aspect of the calcaneus will bisect the articular surface of the distal tibia
- ✓ Placement of a calibrated length marker at the height of the proximal tibia on the table

**** Don't forget to place a calibration marker (2.5cm radio-opaque ball) at the level of the area of interest along with a left or right marker ****