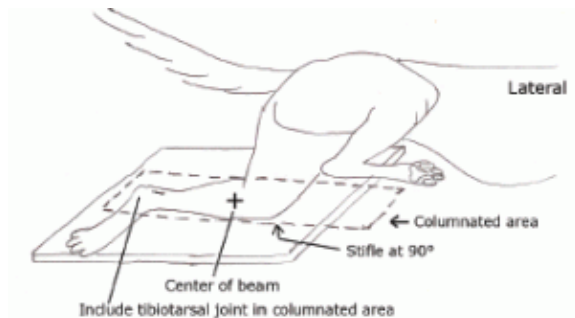


TPLO planning: Taking good stifle radiographs!

Part of the work up typically includes well positioned radiographs. Well positioned radiographs are a must to allow for successful pre-operative planning and surgery.

Follow these steps:

Pending a thorough physical evaluation and cardiovascular health assessment, the majority of radiographs are best done under sedation (e.g., domitor/butorphanol, reversed with atipamezole)

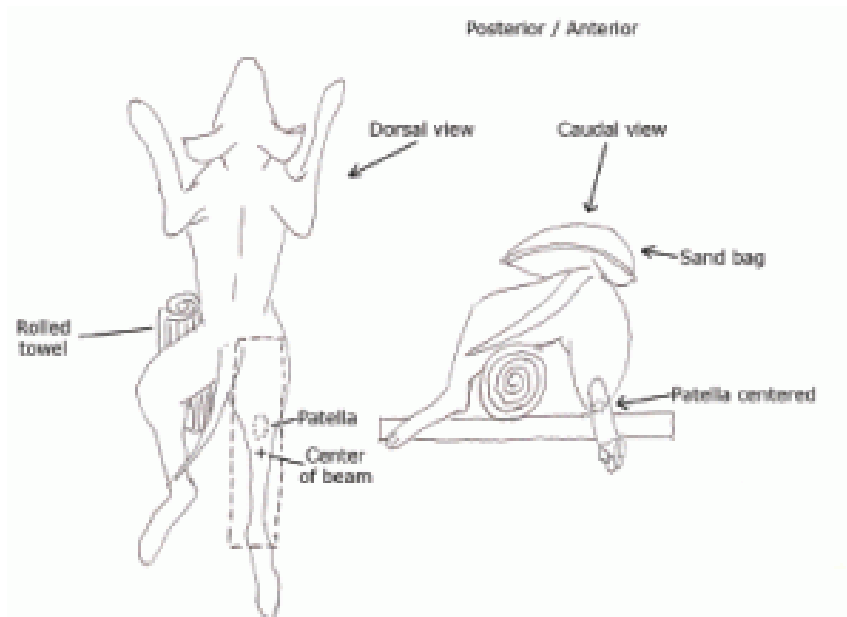


Positioning:

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

- The stifle to be radiographs 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 (this will mean that ~ 40 % of the exposed area will proximal to the stifle).
- 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.
- Alternatively you can hold the upper limb in an abducted position
- If it is not possible to get both the femoral condyles and the tibial condyles to overlap, focus on getting the **tibial condyles** overlapping the most.

- If tibial torsion is present, femoral superimposition is challenging but try elevating and rotating the hock or the stifle in either direction.



Caudo-cranial view: Important is that the patient is placed in sternal recumbency.

- Extend the limb to be radiographed caudally with the hip and stifle in extension. A sand bag type weight on the pelvis may help hold the hip in extension.
- Place a rolled towel or foam under the inguinal area on the contralateral side that is to be radiographed.
- Place the patella so that it is cantered under the stifle.
- This can be tricky part and is judged on the radiograph by noting if the patella is cantered in the distal femur and both fabellae are bisected by the medial and lateral edges of the femur.
- In a straight limbed dog, the medial border of the calcaneus will bisect the distal point of the centre of the tibio-tarsal joint.

- **Caution:** Pulling on the paw to steer the patella tends to torque the hock and give an artificially mal-aligned appearing radiograph.

Important: place a calibrated length marker into the field as well as a R/L marker (see example below)

