

Radiography of the carpus

Step-by-step guide

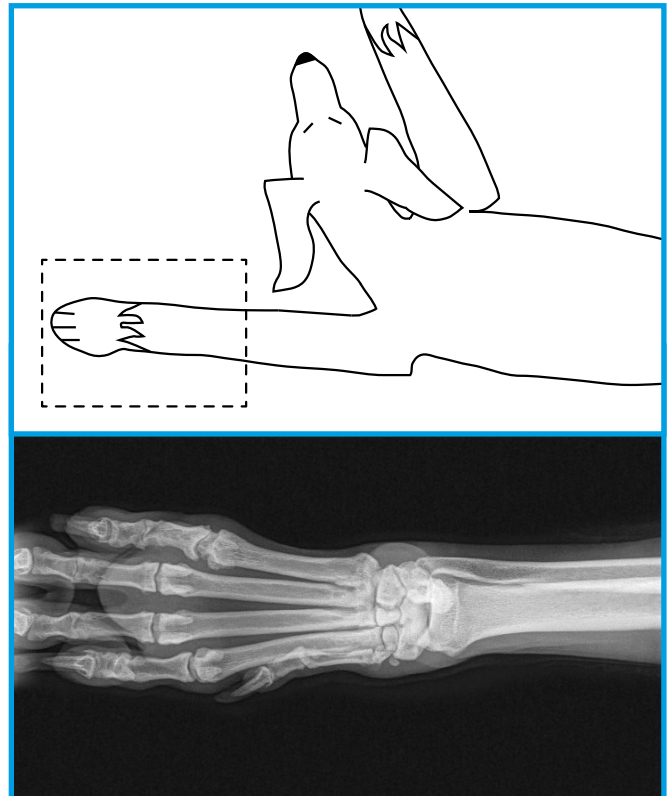
Mediolateral view

- Place the patient in lateral recumbency with the affected limb down against the plate.
- The contralateral thoracic limb should be extended caudally using a sandbag or tie to secure it.
- The beam should be centred over the carpal joint, collimated to include the digits cranially, mid radius/ulna caudally and the skin edges dorsally and ventrally.
- Place a radiographic marker of known dimension at the same height as the carpus, using cotton wool to elevate the marker if required.



Cranio-caudal view

- Place the patient in sternal recumbency using sandbags as necessary to support the chest and abdomen in this position. Allow the pelvic limbs to relax in whatever way they are comfortable.
- Gently rotate the patients head and contralateral limb away from the affected limb and secure these with a sandbag.
- Extend the affected limb cranially, either using a sandbag behind the elbow to 'push' or a tie around the paw to gently 'pull' the limb forwards.
- Centre the beam over the carpal joint and collimate to include the digits cranially, the mid radius/ulna caudally and the skin edges laterally and medially.

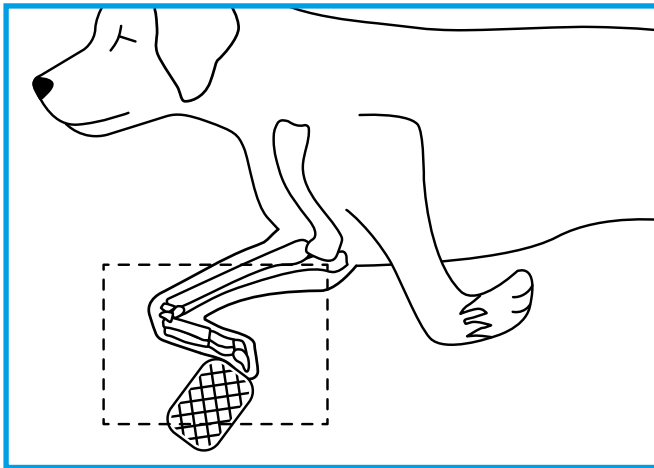


Including the marker in the image at the level of the bone allows us to make pre operative measurements ahead of the day of surgery and decreases the anaesthetic time on the day of the procedure

You can use the marker of your choice as long as the length or diameter of the marker are known to you. Ideally, you could use a ProVetSurg marker with an embedded ruler - please ask us if you need one for your practice.

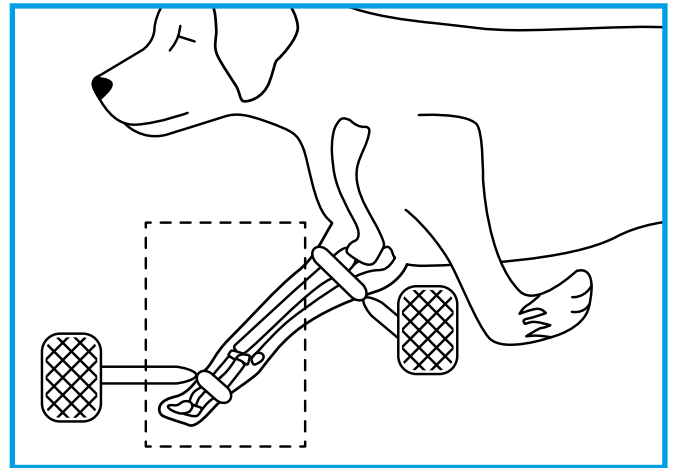
Stressed views

In some cases, additional views are required to further assess the patient. 'Stressed' views can help evaluate soft tissue injuries or identify articular fractures.



Flexed lateral carpus view

- Maintaining the same position as for a standard lateral carpus, gently flex the carpal joint so that the palmar aspect of the manus touches the distal radius/ulna, and secure this in position with an adhesive tape or sandbag against the plantar aspect of the manus.
- Centre the beam over the carpus and collimate to include the distal radius/ulna and complete carpal and metacarpal regions.



Hyperextended carpus view

- Once again, maintain the same position as for a standard lateral carpus x-ray, however this time gently apply a piece of adhesive tape to the distal aspect of the affected radius/ulna and gradually secure this caudally to the table or a sandbag.
- With another piece of adhesive tape around the metacarpals, extend the distal aspect of the limb cranio-dorsally so that the carpal joint is hyperextended on the plate.
- Centre the beam over the carpal joint and collimate to include the whole carpal joint, digits and distal radius and ulna.

We would recommend obtaining these views if you cannot establish a cause for lameness/discomfort with a standard lateral and dorsoplantar views. Application of stress to the affected joint enables us to see if there is any joint space widening which may be as a result of damage to the soft tissue structures.