

## Arthrodesis Surgery

**Arthrodesis** is the surgical fusion of a joint. This means the bones forming the joint are permanently joined together so that there is no movement in this part of the limb. Arthrodesis is a salvage procedure that is generally only performed when there are no better options to return good function to the joint.

### Reasons for performing an arthrodesis:

- osteoarthritis that is causing chronic pain that cannot be managed medically
- joint instability
- fracture involving the joint surface
- irreparable damage to a periarticular muscle/ligament/tendon mechanism

**Risks and complications:** The majority of arthrodesis operations are uneventful and are not associated with complications, however, this is a major procedure and the following complications are possible:

- Loosening or breakage of implants (plates, screws, pins) may occur if the joint fails to fuse in sufficient time. Implant failure can result in joint instability and necessitate further surgery.
- Wound infections are seen primarily when a degloving injury occurs, followed by arthrodesis of the carpal (wrist) and hock (ankle) joints. Wound management within the first few weeks of surgery is of vital importance to minimize this risk. Dressings are often applied to the limb to minimize swelling and prevent the patient interfering with the wound.
- Fracture of bones adjacent to the fused joint may occur due to the abnormal forces that result following arthrodesis surgery.

**Risks of General Anesthesia:** We listen closely to your pet's medical history and carefully review any provided medical records. Your pet will have a detailed physical exam, appropriate pre-operative screening blood tests, and possibly radiographs to identify and control anesthetic risk factors. Even with these measures, anesthesia remains a small, but present risk. For this reason, we use the safest intravenous and inhalational anesthetics. Our anesthesia doctor and highly experienced technical staff are well trained in the administration and monitoring of all types of sedation and general anesthesia. Your pet is carefully monitored by a formally trained and experienced licensed technician during anesthesia and recovery, and is under the care of our ER veterinarians and veterinary staff the night following their procedure.

**Prognosis and General Considerations:** Limb function after arthrodesis surgery is primarily dependent on which joint is fused. Limb function is very good to excellent for the carpus (wrist) and intertarsal-metatarsal (lower hock) joints, fair to good for the elbow joint, and poor to fair for the tibiotarsal (upper hock) and shoulder joints.

**At Home:** Your pet will typically go home the day after surgery, and during your scheduled discharge appointment we will review our detailed and written home care instructions. We will also answer any questions and address any concerns that you may have at that time.

- We will provide medications for discomfort during the post-operative period.
- In general, you should plan for 8-12 weeks of activity restriction after surgery.
- We recommend that you keep your pet in relative confinement (crate, kennel, smaller room with a baby gate, "mud" room, laundry room) when unsupervised.
- Slow, short leash walks 3-5 times per day on a level surface are recommended. If your pet tends to pull on the leash, consider a Gentle Leader™, pinch collar, or similar device to discourage this behavior.

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- Your pet's limb will be supported in a splint for 6-8 weeks followed by a soft bandage for 2-3 weeks. The bandage should be kept clean and dry, and will be changed every 10-14 days or so. If the bandage seems sore to your pet, has a bad odor, or gets wet, it should be changed.
  - Radiographs will reassess healing at 8 weeks and 4 months after surgery. The amount of exercise and activity will be adjusted at these assessments based upon the amount of bone healing, but generally activity will be increased gradually between the 8<sup>th</sup> and 16<sup>th</sup> week after surgery.

And remember, we are here for you if you have questions. Just give us a call at **919-545-1001**, extension 2 or send us an email at [surgery@quartetvet.com](mailto:surgery@quartetvet.com)