Post Surgical Care of Joint Fusion Surgery

Home patient care after orthopedic surgery is critical to the success of the surgery. Allowing your pet too much activity may alter the anticipated outcome of the surgery. The following instructions will be your general guide to home care. Your surgeon may have more detailed instructions for you regarding a rehabilitation program for your pet’s specific surgery.

Joint fusion (arthrodesis) is a surgery in which all the cartilage is meticulously removed from the joint surfaces with a high speed surgical drill in order to get the bones to fuse together forming one large bone and eliminating the moving joint. This procedure is done whenever the joint is injured beyond repair to prevent chronic pain and discomfort. Your surgeon may fuse part of the joint (partial arthrodesis) or the entire joint (panarthrodesis) depending upon the extent of the injury. In most cases, a specialized bone plate, external fixator, or pins and wires are used to stabilize the joint after surgery. In order to prevent implant failure with plates or pins and wires, an external splint or cast is needed to support the joint.

Early healing is usually visible within six to eight weeks and many times the splint or cast can be removed shortly thereafter. Please refer to the splint/cast care handout as improper care can lead to devastating complications for your pet.

**General Exercise and Activity Restrictions:**

The patient should be confined for a minimum of 6-8 weeks following the surgery. **Only three activities are allowed during this time:**

1. The patient can be in the house under the immediate control (leash) of the owner, on a carpeted surface only, without playing or fooling around.
2. The patient is left in a traveling kennel or exercise pen while unattended (see notes on exercise pens and kennels). Never put the patient in an outside run, patio or free in backyard.
3. The patient is under the direct supervision of the owner on a leash while outside for sunning or elimination's.

Please follow the Fracture Rehabilitation Program Handout for more detailed instructions.

**Activities That Are Not Permitted:**

1. No Free Activity (playing, jumping, running or long strenuous walks).
2. No Stairs (1 or 2 are alright to go outside)
3. No outdoor dog runs or "Doggie Doors".
4. No slippery floors (tile, linoleum or wood)
5. No general confinements (garage, patio, bathroom, porch, laundry room, bedroom or kitchen) without a kennel.

Note: Most dogs do very well with the 6-week confinement restriction. However if your dog is difficult to control or has an exceeding amount of energy, the use of small amounts of a tranquilizer may be necessary to help during this confinement period. If you cannot control your dog or you cannot take care of your dog post-operatively it may be better to board your dog with your veterinarian for the first 3 weeks after surgery.

Other Post Operative Instructions
1. Sutures or Staples are removed in 2 weeks. Use all medications as directed.
2. Licking at the incision should be discouraged because it may lead to chewing at the sutures or staples causing a wound infection. It may be necessary to bandage the leg or use an Elizabethan collar to prevent licking.
3. Bandages and splints should always be kept dry and clean. Any odors and/or persistent licking are indicators that there may be a potential problem and should be checked by your veterinarian immediately. Bandages and splints should be checked weekly by your veterinarian or veterinary technician.
4. Feed your pet its regular diet but reduce it by 10% to allow for reduced activity.
5. Mild swelling may occur near the incision or low on limbs. Your veterinarian should check moderate or severe swelling immediately.
6. Progress radiographs are usually taken between 3-4 weeks after surgery and again 3-4 weeks after that to be sure the fracture is healing properly.

Resuming Activity
Resuming full activity and exercise will be determined in most cases by the radiographs taken at 6-8 weeks after the surgery. Unless instructed otherwise, follow your pet’s individual rehabilitation program. Recheck immediately if your pet suddenly starts using their leg less than before.

Expected Results
Orthopedic patients heal in about 2-4 months for most bone surgeries and slightly longer for soft tissue problems such as ligaments and tendons. Most patients will return to controlled activity in 2 months and full activity in 3-4 months. Most athletic dogs will return to full function in 6 months.

Complications
As with any surgical procedure, complications can occur. Unlike human patients who can use a sling or crutches, our patients do not know enough to stay off a healing broken bone so restricted activity is a major responsibility of you, the pet owner. Failure to follow these instructions carefully can lead to delayed healing,
broken implants, loose implants, or even failure of the bone to fuse which leads to costly second surgeries.
The most common complication is delayed healing, where, despite our best efforts to reduce and stabilize the joint, individual patients respond slower than others. In other cases, the bone may refuse to fuse and require additional procedures like bone grafting. Infections are quite uncommon in veterinary orthopedic surgery, but when they do occur they can markedly affect the ability of the bone to heal.
The fusion of a joint is a race between the implants failing, as all metal does, and the bone fusing. Thankfully, the bone fusion wins this race in almost all the cases we encounter with cooperative owners. If you have any questions, please feel free to ask your veterinarian.