Arthrodesis (Joint Fusion Surgery)



One of the most useful and efficient ways to convey information to you about your pet is via the written word. We carefully craft these notes to give you helpful information and accurate expectations around your pet's surgical experience.

Please read this. Please save it and read it during each stage of the recovery process. Surprises make for a stressful time for everyone.

Photo and video examples may be found on our website: www.directvetsurg.com in the **Pet Owner Portal** under "DVS Resources".

Your pet has had an unstable joint surgically fused with metallic implants called bone plates/screws and/or pins/wires. This procedure is known as an arthrodesis. These implants are surgically attached to the bone, bridging the joint to provide stability until the bones heal together (i.e. fusion). This fusion takes quite some time; splinting and activity restrictions must be quite strict until good fusion develops. Long-term, these implants may create irritation and need to be removed after the fusion is mature. Your pet's gait may be altered in appearance, but a pain-free joint with minimal activity restrictions is the ultimate goal.

General Information

Please keep a note of your questions as you and your pet progress thru recovery and address them to your primary care veterinary team. Our surgery group will contact your primary care team on **Day 2** (after their phone follow-up with you) and **Day 14** (after your recheck visit with them) to check in on your pet's progress and see if you have had any concerns or questions. This method will maintain continuity in care and an accurate patient medical record.

First few days postop

Monitoring

Please keep your pet in a <u>comfortable</u>, <u>safe</u>, <u>indoor location without free access to stairs</u> for the next 24 hours as he/she recovers from anesthesia and surgery.

Your pet may be groggy for the next few days. He or she may whine or appear more anxious than usual; this may indicate pain/discomfort or side-effects of the medications. Please call your primary care veterinary team for assistance with medication adjustments or return for exam and additional pain medications as needed.

Monitor appetite and attitude. *If both do not steadily improve over the next 2-3 days,* please call your primary care veterinary team or return for progress evaluation and problem-solving.

You can expect your pet to have a bowel movement within 5 days. Some animals take longer than others depending on when they last ate prior to surgery and when they started eating after surgery. It may be abnormal in color and consistency for 2-3 days. If you have any concerns, please speak with your primary care veterinary team.

Please confirm that your pet has urinated within 24 hours of returning home. If he/she does not, or you notice any problems related to urination, please speak with your primary care veterinary team.

Closely supervise your pet's movements over the first 3-4 days when s/he will be groggy from anesthetics and pain medications. Limit activities to necessary events only (on leash/out to go to the bathroom; access to food/water.)

MEDICATIONS

It is likely that you have been prescribed one or more medications (given by mouth) for your pet over the first 2-3wks of recovery. During the discharge appointment or shortly thereafter, please make sure you understand:

- what each medication is being used to treat,
- what side-effects may develop, and
- whether or not the medication should be refilled and continued.

BANDAGE CARE

A padded bandage with rigid splint has been applied to the operated site. The goal of the bandage is to provide pressure to the surgical site to minimize swelling and improve patient comfort for 12-24 hours. If this bandage starts at the foot, please place a plastic baggy over the foot whenever you take your pet outside to prevent soiling of the bandage; remove when indoors.

It is recommended the limb be supported with a rigid bandage for _____ weeks. The first bandage change is recommended in ____ days.

The next bandage changes are recommended every 3-7 days depending on swelling and healing progress; adjustments to this interval will happen through the recovery period.

It is very important you monitor the bandage carefully; if there are any concerns you should contact your primary care veterinary team. Photos may be beneficial for initial evaluation; an exam may be necessary for evaluation and bandage change.

We can discuss having a custom brace made by a local veterinary physical therapist that can be managed by you at home, instead of the splint. This might be an easier option for longer, 2-3 month splint wear demands.

We strongly advised that you <u>do not modify</u> the bandage in any way. Adding tape or other wrappings can seriously compromise the safety of the bandage/splint. If you are concerned about the security or integrity of the bandage, please return for re-evaluation and reapplication as needed.

Please know that bandages and splints can cause very serious complications. They are very effective treatment tools for better healing and pain control, but careful monitoring and appropriate follow-up <u>must</u> occur. If you have any questions or concerns related to issues outlined above or in general regarding bandage/splint wear, please do not hesitate to call your veterinarian or return for evaluation.

Week 1-2 postop

Monitoring

Do not allow your pet chew the splint. Pets tend to want to chew early in the healing period when the surgical site is most uncomfortable, or when the splint is causing pain or itching from skin moistness or pressure sores. If necessary, please prevent access to the bandage by using protective boots, an E-collar or other devices, if you must leave your pet unattended. See www.directvetsurg.com, Pet Owner portal >Pet Links and DVS Resources

Do not ignore continued splint chewing; this may indicate problem hidden underneath. Please have the splint evaluated for problems.

Progress exams

Please return to your primary care clinic in 10-14 days for a progress exam. Skin healing will be evaluated, sutures (if present) will be removed, use of the limb will be assessed and any questions you have will be addressed.

Your pet should start touching his/her toe down within the first 2 weeks. Thereafter, leg use should steadily improve <u>even when wearing a splint</u>. If you notice a sudden deterioration in leg use at any time after surgery, please see your veterinarian for exam.

RESTRICTIONS

Avoid any rigorous, off-leash "exercise-like" activity while the splint is in place and for 4 weeks after removal. For dogs, short, leashed walks to urinate/defecate are fine.

Minimal, supervised/assisted access to stairs is advised during restricted period. Use baby gates, etc. to prevent free access to stairs during this restricted period. When navigating stairs (up and down), have a hand/leash on collar/harness and a leash/safety-strap under the belly to prevent slips, stumbles, falls.

Please use a short (~6ft), hand-held leash when outside to urinate/defecate. Confine your pet to a small area/room/crate when unattended. Please do not allow your pet to run, jump or play during this restriction period.

If your pet's personality-type challenges these restrictions, discuss options for medicinal-assistance for your pet to make restrictions easier to manage (i.e. Trazadone, Gabapentin, Tramadol, other).

Month 1-2 postop

RESTRICTIONS & BANDAGE CARE

Continued restriction and attention to splint management is required through the entire healing period. Even when your pet is feeling more comfortable, please maintain your restrictions and splint evaluate/change routine.

Progress exams

If your pet is doing well, other than routine bandage change visits, the next visit for x-rays will be 6-8 weeks after surgery. Leg function will be evaluated, and x-rays will be taken of the fusion site to judge healing.

Your pet may need to be seen again at 12 weeks if healing was incomplete on the first x-rays.

Long-term lifestyle

There are no long-term restrictions to activity for your pet after the arthrodesis/fusion is complete. A gradual return to full function should occur, to allow for a smooth return of muscle function and strength following the restricted period.

Your pet will have an altered gait with the joint fused; this is due to the fact that that joint can no longer flex and extend with weight bearing. This is a functional lameness, not a painful lameness. It may cause some disability with jumping, and activities that require agility. Use caution as you re-introduce your pet to activities.

Once an arthrodesis is well healed, there is minimal risk to that site in the future. In approximately 25% of patients, the metal implants may cause irritation, become loose, or, rarely, become infected (it is believed these infections originate from bacteria normally found in the blood stream in patients with infections elsewhere in the body or from dental disease). Implants can also create bone pain caused by cold temperatures since they are only covered with a thin skin layer. The metal implants may have to be removed months to years after the original surgery if they cause the patient problems. Minor surgery under general anesthesia is usually required. Please have your veterinarian evaluate any lameness or pain you notice associated with the operated leg.

Checklist:

HOME MONITORING AND PROGRESS CHECK-IN WITH VETERINARY TEAM	
	<u>Pet attitude and appetite</u> —Are these improving daily? What are your observations? What are your specific concerns?
	<u>Pet mobility</u> —Is this improving daily? What are your observations? What are your specific concerns?
	<u>Incision health</u> —Is redness and swelling going away? Is there discharge or moisture? (Photos taken close-up and at different angles are helpful for your primary care veterinary team.)
	Pet pain level—What are your observations? What are your specific concerns?
	<u>Other</u>

Based on your own experience through this, we welcome and encourage suggestions to this information that may help future patients and their people. Pay it forward! (directvetsurg@gmail.com)

--The DVS Crew