

## Hip Denervation



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](http://www.directvetsurg.com) in the Pet Owner Portal under "DVS Resources".

Your pet has had the microscopic branches of the nerves that serve the hip joint(s) removed/disabled. These nerves normally carry pain signals to the brain, so without them, the hip joint(s) will feel more comfortable. Only the branches of two of the three main hip nerves were removed, so some hip discomfort may remain or occur periodically. The hip joint itself (i.e. cartilage, joint capsule, joint fluid) were not modified in any way. And the nerves that control muscle function and hip movement were not involved in this procedure. Patients generally return to pre-surgical leg function within the first week; thereafter, rear leg muscle strength and size steadily improve over the next 2-4 months if no other orthopedic or neurologic problems are present.

### 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 comfortable, safe, indoor location without free access to stairs 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.

If the discomfort associated with hip arthritis has been reduced by the surgical procedure, you can gradually reduce pain medications as tolerated after 2wks. Occasional "as needed" use is expected, and you can plan for this with medication administered right before a big, fun weekend, etc.

## BANDAGE CARE (IF PRESENT)

A clear, plastic bandaid may have been applied to the incision (Tegaderm). This will protect the incision from infection from the environment and a wayward pet tongue! It is

useful for 1-3 days. You may remove it like a “bandaid” at any time. If it is hard to peel off, waiting longer may make for easier removal. There is no urgency in taking it off.

## ***Week 1-2 postop***

### MONITORING

Please look at the incision twice daily. It should be dry, slightly red along the margins, slightly swollen/thick on the edges with a light crust down the center. Over several days, it should lose redness and swelling.

Problems to call your veterinarian about:

- gapping (the edges should be exactly touching)
- ongoing or new discharge (other than small amount of crusting)
- swelling (other than slightly raised skin near edges).

Some bruising is normal and will resolve in 5-7 days.

The occasional patient will have more extensive bruising and/or swelling on day 2-3. If this develops, please let your primary care veterinarian know; a visit or sending photos will help them characterize the issue and decide on a course of action. The vast majority of the time, this is a transient issue that will follow a typical 5-7 day course resolving.

Do not allow your pet to lick or chew the incision. Pets tend to want to lick early in the healing period and scratch later in the healing period; this can compromise the incision and predispose to infection. If necessary, please prevent access to the incision by using creative clothing options (ex. backward long-sleeved T-shirt worn as “pants”), an E-collar or other devices, if you must leave your pet unattended. See [www.directvetsurg.com](http://www.directvetsurg.com), Pet Owner portal→Pet Links and DVS Resources

### 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 to 90% normal at 6-8 weeks. If you notice a sudden deterioration in leg use at any time after surgery, please see your veterinarian for exam.

## DIET

The single **most** beneficial and **least** expensive treatment for arthritis (and general health) over the lifetime of your pet is maintaining your pet on the lean/thin side of normal his/her whole life. Any orthopedic condition can progress with arthritis over time due to excessive wear & tear; carrying less body weight will relieve some of this stress from the joints. Good parameters to monitor body condition are:

- 1) you should be able to feel the ribs and pelvic bones, but not see them;
- 2) your pet should have an "hour glass" figure when viewed from above looking down;
- 3) your pet should have a tucked-up belly when viewed from the side.

Glucosamine/chondroitin supplements ("chondroprotectants") may have some beneficial effects in these patients, but this has not been clearly established. High-dose (medicinal dose) fish oil may improve comfort in arthritic joints longterm. You and your veterinarian should discuss whether or not these products would be helpful for your pet.

## RESTRICTIONS

Avoid any rigorous activity for 2 weeks. 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.

## PHYSICAL THERAPY REGIMEN

Our lives are often very busy, so if you must err, err on the "do less" side of these instructions. Less physical therapy will result in a slower return to function, but more aggressive physical therapy by a non-professional too early may result in failure of the

implants and surgical repair. Cats (and some dogs) often resist physical therapy dramatically; avoid any activity that results in major uncooperative behavior.

*Week 1:* Apply ice packs (wrapped in thin cloth) to incision area twice daily for 10-15 minutes. Baggies of frozen peas work well for this, or make an ice pack by freezing 2 parts isopropyl alcohol to one part water in a ziplock bag. Continue 5 days. (You may apply ice packs to the hip region anytime during the 10wk recovery period if soreness is noted after each session.)

*Week 2:* Range of Motion Exercise- Have your pet lie on his/her good side. Apply a warm compress to the hip, and hold with one hand. Hold the knee with the other hand. Slowly and gently push the leg backward into full extension of the hip; hold for 5 seconds. Slowly pull the knee forward into full flexion of the hip; hold for 5 seconds. Repeat this motion 15-20 times slowly once to twice daily. This exercise should not be performed to the point of pain or resentment. You should gradually be able to extend the hip further over the next 4 weeks.

*Week 3:* Sit-Stand Exercise—Ask your pet to sit and stand 10 times in a row twice daily for the next 4 weeks. Use plenty of treats to encourage participation.

## **Month 1-2 postop**

### PHYSICAL THERAPY REGIMEN

*Weeks 3-6:* Swimming is wonderful rehabilitation exercise when performed correctly. You may allow controlled swimming after week 2. Controlled swimming requires that your pet not jump or leap into the water; walking into the water until it is deep enough to swim is required. Throwing balls to fetch often results in sudden jumping and lunging, which can cause serious problems in the early healing phase. Do not over extend your pet; start with short excursions (5 minutes) and increase duration and frequency gradually.

*Weeks 3-6:* Walking—Begin with short walks (1/2 block; 5 minutes) twice daily, and gradually increase your walk distance/time by 5-10 minutes each week.

*Weeks 7-10:* Active swimming, walking, jogging, play may be started if your dog is otherwise healthy and able to perform vigorous activities. You may throw balls, etc. and encourage fetching during this period.

## Long-term lifestyle

The prognosis for dogs treated surgically with hip denervation is considered good. The majority of dogs improve their thigh muscle size and demonstrate much less stiffness and pain in the hips. It is not uncommon for dogs with hip degenerative joint disease (“arthritis”) to also have other joint or spine problems that may complicate a steady improvement following this procedure.

There are no recommended long-term limitations to a pet’s lifestyle.

## Checklist:

### HOME MONITORING AND PROGRESS CHECK-IN WITH VETERINARY TEAM

- Pet attitude and appetite—Are these improving daily? What are your observations? What are your specific concerns?
- Pet mobility—Is this improving daily? What are your observations? What are your specific concerns?
- Incision health—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?
- Other

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](mailto:directvetsurg@gmail.com))

--The DVS Crew