Intervertebral Disc Surgery Consent Form

Your pet has been diagnosed with a probable ruptured (Hensen Type I) or bulging (Hensen Type II) disc that needs surgical repair. Neurosurgery is a combination of both art and science and the neurosurgeon will evaluate your pet’s radiographs and neurological status and determine the best method of treatment given your pet’s age, type and location of rupture, and the home environment for post-surgical rehabilitation. The surgeon may utilize one or a combination of procedures that may be best determined during the surgery. The goal of any neurosurgery is fast return to function of the damaged spinal cord and nerves without doing any further harm. Although experts do not all agree, most believe that early surgical intervention is the best treatment option available in veterinary medicine.

As with any surgery on the spinal cord, inadvertent complications can arise including worsening of your pet’s condition. Even under the best circumstances, most patients will recover from surgery (and a myelogram in most cases) with a neurological status that is worse than before surgery. This is a normal response to the irritation of the spinal needle and contrast agent and the gentle, but necessary, manipulation of the spinal cord during surgery to retrieve the ruptured disc material. In most cases, your pet will return to their pre-surgical status within three to five days. 92-95% of first time disc patients that have deep pain perception (patient must react to toe pinch by turning their head, pulling the leg back is a local reflex and occurs in patients with completely transected spinal cords) at the time they are operated on eventually make a complete recovery with the more paralyzed patients taking longer to return to ambulation (walking) than those who can barely support they’re weight. About 62% of patients are walking by three to four weeks after surgery and some can take up to 12 weeks. Some have residual weakness but are able to walk, urinate and defecate normally and have no residual back pain. If your pet does not have deep pain perception in the hind legs, the chance for a complete recovery diminishes to 69%. All experts agree that patients without deep pain perception need surgery within 12-24 hours and after 72 hours the recovery rate drops to less than 10%. In some patients the ability to determine whether they actually “feel” a toe pinch can be very difficult (equivocal) and determining a prognosis in these patients can be challenging.

Lastly, we occasionally find something other than a ruptured or bulging disc causing your pet’s paralysis or paresis. These include meningitis, tumors, strokes, and trauma (dislocated vertebrae or hematomas). We always try to save any spinal fluid we obtain during myelogram in case we need to submit it to the lab but almost half of all myelogram injections result in a “dry tap”, meaning no spinal fluid is found due to cord swelling.

In most cases, there will be no complications and your pet will return to normal in 4-12 weeks. After fully discussing the planned surgical procedure and associated risks with your doctor or the surgeon, please sign the consent for surgery below:

The undersigned owner or authorized agent of admitted patient _____________________ hereby authorizes the admitting veterinarian (and his/her designated associates or assistants) to administer such treatment as is necessary to perform the below-mentioned procedure. The nature of the
procedure(s) has been explained to me and no guarantee has been made as to results or cure. I understand that there may be risk involved in these procedures. I consent to the administration of such anesthetics or tranquilizers as are necessary.

Anesthetic Risks: (Although every effort is made to make anesthesia as safe as possible including vital sign monitoring and use of the most up to date anesthetic agents and equipment, understand that anesthesia has inherent risks). The incidence of complications from anesthesia is extremely low and we do not anticipate any in your pet but on rare occasions the following can occur:

1. Allergic reaction to the anesthetic agents
2. Heart rhythm abnormalities
3. Untoward reactions to the gas including drops in blood pressure or respiratory difficulties
4. Just like in humans, on very rare occasions, general anesthesia can result in death.

_We are prepared and will treat any anesthetic reactions if they occur, but general anesthesia is never completely without risk, just like driving a car._

I consent to the following surgical procedure(s): Myelogram and laminectomy at one or more disc spaces; possible fenestration (removal) of any remaining disc material in ruptured disc space. Possible spinal tap if no cord compression is found on myelogram.

Myelogram risks include (all extremely rare):

1. Allergic reaction to myelogram contrast agent or damage from spinal needle (rare).
2. Damage to spinal cord from needle tip
3. Inadvertent injection of contrast material into substance of cord
4. Bleeding into the spinal canal
5. Seizures (more common in Doberman Pinchers and cervical myelograms versus lumbar myelograms) which can be mild and last for a few minutes after awakening or severe life threatening uncontrollable seizures necessitating emergency clinic care overnight at additional cost. Less than 5% of all patients have even a single seizure.
6. Infection (less than 3% ) which may require additional testing and medication at an additional cost.
7. Worsening of neurological status that may be temporary or permanent, including complete paralysis.
8. Inability to inject that contrast agent into the spinal canal due to arthritis or confirmation of the spine.
9. Non-diagnostic study (2-5%) necessitating a repeat study in 2-3 days or an MRI or CAT scan.
10. Central canal of spinal cord having contrast agent injected into it causing neurologic damage (rare)
11. In about 1% of myelograms, the radiographs will have to be electronically transmitted to a radiologist for interpretation at additional cost ($75)
12. On occasion, the myelogram will show no cord compression which usually means your pet may have had a stroke like condition called Fibrocartilagenous Emboli, meningitis, or trauma. Surgery is not necessary for treating from these conditions.
13. On very rare occasions, the myelogram will show a tumor causing cord compression and surgery will not be helpful.

Intra-operative surgical risks include:
14. Improper identification of the surgical site
15. Inability to find disc material
16. Inadequate removal of disc material
17. Diffuse disc material
18. Adhesion of disc material to dura (outer layer of spinal cord)
19. Excessive bleeding
20. Severe spinal cord swelling

Early postoperative complications include:
21. Infection (less than 3%) which may require additional testing and medication at an additional cost.
22. Blood clots that can lodge in major organs causing stroke or rarely death.
23. Delayed healing of the spinal cord (this is not under the control of the surgeon).
24. Worsening of neurological status that may be temporary or permanent, including complete paralysis.
25. Seroma (pocket of fluid) under the incision can occur in some patients that usually resolves without treatment.
26. Ascending hematomyelia, a rare condition where the spinal cord hemorrhages internally and is usually fatal. This usually only affects patients without deep pain perception. This usually occurs within three to five days after surgery.
27. Myelomalacia (melting or necrosis of the spinal cord substance from lack of oxygen and blood supply) which can result in permanent paralysis.
28. In cervical (neck) disc surgery, acute sympathetic blockade or severe bleeding can both result in death, although both of these conditions occur very rarely.
29. Rupture of a second disc (and very rarely a third disc) during their lifetime occurs in about 3% of patients except for Daschunds where the recurrence can be up to 6%.
30. Occasionally (2-3%), a dog will herniate a second disc in the early postoperative period due to loss of protective muscle tone under anesthesia or some of the current ruptured disc material can shift during surgery to the opposite side and continue to cause compression. An MRI, CT or second myelogram and surgical procedure may be necessary. This can be quite costly but fortunately the rate of occurrence is extremely low. If your pet requires a second procedure in the early post-operative period, we discount the fees to cost of materials and labor only.
31. Patients with chronic compression (clinical signs for many months or even years or a history of paretic episodes in the past) can deteriorate after surgery as a result of reperfusion (fast return of blood flow to an area that was lacking blood flow) or a loss of a few remaining nerve axons.
32. In large breed dogs spinal instability after decompression can result in worsening of signs and additional surgery is many times required.
33. Pneumothorax, scoliosis, self-mutilation of feet and penis, and femoral nerve paralysis can all occur but are usually transient and resolve on their own.
Late postoperative complications include:

1. Laminectomy scars can form many months after surgery which can put pressure on the spinal cord and need surgical removal. This is extremely rare.
2. Infection of the disc space (discospondylitis)
3. Residual neurological deficits
4. Fecal incontinence or urinary incontinence, usually intermittent, and usually only happens in about 8% of patients that have no deep pain perception after regaining pain perception.
5. Recurrent urinary tract infections

Despite this long list of potential complications, if your pet has pain perception before surgery, the outcome is considered “excellent” following decompression. Serious complications are extremely rare but since we are dealing with the spinal cord, any complication has the potential to cause great harm. Dr. Newman has done over 1200 laminectomies and has an excellent track record with very few complications.

Please be sure to read the consent form for Myelogram which fully discusses that procedure.