

Information sheet on spinal disc problems and spinal surgery for owners

What is “disc disease”?

The intervertebral discs are tissue structures that sit between the bones (“vertebrae”) of the spinal column. These discs can undergo degeneration and this is typically seen in certain breeds including Daschunds, Shih Tzus, Lhasa Apsos, spaniels, basset hounds, and often in dogs that are just a few years old. Disc disease can cause pain (mainly from compression of spinal nerves), and/or spinal cord damage. Spinal cord damage results from contusion (“bruising”) when disc material hits the spinal cord, or from the compression of disc material squeezed against the spinal cord. Spinal cord injury prevents the brain from effectively communicating with the limbs beyond the point of injury. Surgery only addresses problems caused by compression, by “decompressing” the neurological structures, but surgery doesn’t address contusion.

Disc disease is classified as:

- Type 1 disc disease, also called disc “extrusion”. The disc “explodes”. This is often a sudden onset problem. Signs can be dramatic with dogs “off their back legs”, but prompt intervention can give very good outcomes as much of the spinal cord damage might yet be reversible.
- Type 2 disc disease, also called disc “protrusion”. The disc bulges. This is often a chronic, gradually progressive problem. The signs are often less dramatic than in type 1 disc disease, but the improvement with surgery may be less assured because the disease is chronic and permanent changes may already have befallen the spinal cord.
- Type 3 disc disease, also called “low volume, high velocity” disc disease. A small piece of intervertebral disc walllops into the spinal cord, bruising it, but not compressing it. This is not a problem that surgery can help with.

Which cases need surgery? Cases that need surgery will have compressive disease and the patients will be ...

- off their legs or nearly off their legs
- getting worse
- less severe in terms of signs, but not improving after a period of a few weeks’ conservative treatment (which involves strict exercise restriction using a case and probably the administration of pain-relieving medication).

Which kind of imaging is best surgery to show where the spinal cord is being compressed?

- **MRI scan.** This gives excellent information, has no inherent risks beyond general anaesthesia but it requires very expensive equipment and so it is a pricey procedure.
- **Myelography.** This involves injecting a contrast agent into the fluid sac which surrounds the spinal cord, just behind the skull or at the bottom of the back. Myelography is usually completely adequate for surgical decision making. It only requires an x-ray machine and so is a lot cheaper than MRI/CT scanning. It allows a sample of the cerebrospinal fluid to be collected for analysis. It does involve injection close to delicate structures and so there is a small inherent risk but with experience and good technique we consider these risks to be very modest. Myelography is fast and immediately available and we think these advantages make it very attractive.

What outcome are we hoping for and how long will it take?

We define surgery as a “success” when we achieve an animal that is:

- Comfortable and without pain. Pain is usually under control in hours or days.
- Continent and able to urinate normally. Continence is usually achieved in days or weeks. In the meantime, there may be a need for hospitalisation or daily out-patient checks to empty the bladder, or you might choose to be trained to manage urination using a catheter.
- Capable of a reasonably normal mobility and activity level. The final level of mobility may not be achieved for months, but patients that are going to achieve “success” will usually be adequately mobile by 6 weeks post-op. There may be some long term neurological deficits, like back feet that “knuckle” over and some appearance of “drunkenness”.

How sure can I be that my pet will achieve “success”?

If there is sensation in the feet when they are firmly pinched, the likelihood of achieving “success” is 90% or more. Recovery continues over many weeks so you will need patience. Be prepared for an emotional “rollercoaster” with prolonged uncertainty and anxiety while awaiting improvement. Watching a spinal case recover is like waiting for a kettle to boil – it takes forever! We see many of these cases but we realise it is new for you! If we are worried about progress, we will tell you. Be aware of the possibility of future disease elsewhere in the spinal column, especially in predisposed breeds.

For further advice please contact us by phone on 07944 105501 or at mail@wm-referrals.com