Hemilaminectomy & mini-hemilaminectomy

Thoracolumbar disc surgery | Dogs

A slipped disc in the back can injure the spinal cord and stop the hind legs working. Surgery removes material pressing on the cord; it cannot undo all damage already caused but will resolve pain and compression, resulting in slow, gradual improvement.

About the procedure

What is happening in my dog's back?

The spine contains bone blocks separated by discs that act as cushions. If the centre of a disc escapes through its outer layer or the disc bulges into the spinal canal, it can bruise and squeeze the spinal cord. Signs range from back pain and an unsteady walk to complete loss of movement and bladder control. Sudden inability to walk is an emergency.

How is the problem assessed?

A neurological examination helps locate the injury and assess its severity, including whether the dog can consciously feel a painful stimulus in the feet. In most cases, CT is sufficient to identify disc material or a diseased disc. CT may identify suitable mineralised disc material. MRI provides the most detail about the condition of the spinal cord. Imaging must be available and reviewed before surgery. Plain X-rays alone cannot show the extent of cord compression reliably.

How do the two operations differ?

A hemilaminectomy opens a window in bone along one side of the spinal canal. The surgeon removes the disc or disc material through this window. A mini-hemilaminectomy (pediculectomy) uses a smaller opening lower on the side of the vertebra, preserving more of the small joints between the bones. The site and amount of compression determine the approach; a smaller opening is not always safer or adequate. Sometimes a disc is also emptied to reduce the chance of further extrusion at that or nearby site.

Could treatment without surgery work?

Selected dogs with mild signs or stable pain may improve with strict rest, medication and monitoring. Dogs with severe weakness, loss of walking or worsening signs often need urgent surgical assessment. If imaging or intensive nursing is needed, referral may be necessary.

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Recovery, risks and home care

Recovery and home care

Expected outcome

Pain often improves before movement returns. Dogs that retain conscious pain perception generally have a better outlook than dogs that have lost it. Recovery may take weeks or months; some dogs never regain independent walking or bladder control.

More common or important ongoing problems

Temporary worsening of weakness, lingering wobbliness, pain, incomplete recovery, difficulty emptying the bladder, urine infection and skin sores can occur. Another disc may slip later; surgery cannot prevent all recurrence.

Home nursing and activity

Use a small padded recovery area with non-slip footing. Prevent jumping, stairs and uncontrolled walking. Support the rear end only as demonstrated. If your dog cannot urinate independently, the team must teach a safe bladder-care plan; leaking urine does not prove the bladder is empty. Keep skin and bedding dry, reposition immobile dogs as advised and give prescribed medicines.

Follow-up and recovery

A wound and neurological check is often arranged in 10–14 days, with earlier assessment for concerns. Rest and controlled rehabilitation commonly continue for several weeks; progress is based on neurological recovery, not the calendar. Physiotherapy is often necessary.

When to contact the practice

Contact the practice urgently for worsening weakness, new inability to urinate, severe pain or a wet painful wound. Weakness spreading towards the front legs, changed breathing or collapse require immediate emergency care.

Questions to ask your vet

What is my dog’s neurological grade? Can my dog feel deep pain? Who will provide overnight care and teach bladder management?

Discussing risks and complications

As with any surgical procedure, complications can occur. Your surgeon will discuss the possible complications, individual risks and expected outcome for your pet during the pre-operative consultation.

General anaesthesia can cause serious complications, including death. Your veterinary team will explain individual risks and alternatives.

Important information

Follow the personalised discharge plan; this sheet is not a consent form. Contact your own practice or its out-of-hours service for urgent care.