



ACVIM

Neurology
Fact Sheet

ACVIM Fact Sheet: Lumbosacral Stenosis

Overview

Degenerative lumbosacral stenosis (DLSS) is a common disorder of dogs. Other names to describe this condition include cauda equina syndrome, lumbosacral stenosis, lumbosacral disease, and lumbosacral instability. This condition is due to compression of the end of the spinal cord in the low back or nerve roots as they leave the spinal cord heading toward the pelvic limbs, tail, anus and bladder. Compression can be the result of an intervertebral disk protrusion/herniation (“slipped disk”), thickening of surrounding ligaments, instability in the spine or vertebral malformation.

DLSS is most common in the German Shepherd and other large breed dogs, especially working dogs. It is occasionally diagnosed in small breed dogs and cats. This condition occurs in middle-aged to older dogs, typically around seven years of age.

Signs & Symptoms

Common clinical signs include low back pain, difficulty rising or sitting down, difficulty jumping onto furniture or into the car, difficulty posturing to urinate/defecate, and difficulty going up stairs. These clinical signs sometimes make it difficult to distinguish DLSS from hip arthritis and other orthopedic conditions. Some dogs have hind limb lameness or weakness, dribbling urine or dropping stool without being aware of it, or weakness in the tail.

Diagnosis

Since the spinal cord, nerve roots, and disks are not visible on routine radiographs (X-rays), MRI is used most often to diagnose this condition. X-rays are often taken because they may demonstrate changes around the low back that are suggestive of lumbosacral stenosis. X-rays are also used to rule out other diseases that cause similar symptoms, such as hip arthritis, cancer in the back bones or infection in the disks (diskospondylitis). Lumbosacral stenosis is sometimes diagnosed using a combination of CAT scan and a myelogram, in which a contrast agent is injected into the fluid surrounding the spinal cord to highlight the edges of the spinal cord.

Treatment & Aftercare

There are two primary forms of treatment: (1) surgery and (2) medical management. Surgery involves decompressing the spinal cord/nerve roots, most often through a procedure called a dorsal laminectomy. This surgery involves removing the bone above the end of the spinal cord/nerve roots, removing any thickened ligaments, and removing the top portion of the protruding disk, if present. Some surgeons will also stabilize the spine if testing shows evidence of instability in the low back. Following surgery, most veterinarians recommend activity restriction for 2-4 weeks followed by a gradual return to normal activities.

Medical management involves modified exercise/activity, pain medications and possibly anti-inflammatory medications (e.g., nonsteroidal anti-inflammatory drugs, steroids). Epidural steroids are sometimes given, and some patients experience symptom relief for up to one year or more. Physical therapy, especially hydrotherapy (underwater treadmill or swimming), may be beneficial. Acupuncture may help reduce pain. Weight loss is recommended for overweight animals.

Prognosis

The prognosis is good to excellent for most dogs treated with surgery. Working dogs, such as police dogs, search and rescue dogs, or military working dogs have a fair to good prognosis following surgery because they are required to stand up on their back legs or jump more than pet dogs, which puts additional strain on the low back. The prognosis for most companion dogs treated medically is fair to good. Many patients can be managed with intermittent long-term anti-inflammatory and/or pain medications.

Fact Sheet Author

Mark Troxel, DVM, DACVIM (Neurology)
Massachusetts Veterinary Referral Hospital
Woburn, MA
© 2015

Fact Sheet Disclaimer

The fact sheets which appear on the ACVIM website are provided on an "as is" basis and are intended for general consumer understanding and education only. Any access to this information is voluntary and at the sole risk of the user.

Nothing contained in this fact sheet is or should be considered, or used as a substitute for, veterinary medical advice, diagnosis or treatment. The information provided on the website is for educational and informational purposes only and is not meant as a substitute for professional advice from a veterinarian or other professional. Fact sheets are designed to educate consumers on veterinary health care and medical issues that may affect their pet's daily lives. This site and its services do not constitute the practice of any veterinary medical or other professional veterinary health care advice, diagnosis or treatment. ACVIM disclaims liability for any damages or losses, direct or indirect, that may result from use of or reliance on information contained within the information.

ACVIM advises consumers to always seek the advice of a veterinarian, veterinary specialist or other qualified veterinary health care provider with any questions regarding a pet's health or medical conditions. Never disregard, avoid or delay in obtaining medical advice from your veterinarian or other qualified veterinary health care provider because of something you have read on this site. If you have or suspect that your pet has a medical problem or condition, please contact a qualified veterinary health care professional immediately.

ACVIM reserves the right at any time and from time to time to modify or discontinue,

temporarily or permanently, these fact sheets, with or without notice.