Golden Vet Physio
Canine & Equine Physiotherapy

Canine Lumbosacral Pain
An Informative Guide

What Is Lumbosacral Pain?

Lumbosacral (LS) pain refers to discomfort arising from the lumbosacral junction (L7–S1) — where the last lumbar vertebra meets the sacrum.
This area is a highly mobile transitional zone, and degenerative or compressive changes can cause significant nerve root irritation or compression, especially of the cauda equina.

Common Causes

1. **Degenerative Lumbosacral Stenosis (DLSS)**
    - Narrowing of the vertebral canal at L7–S1, causing compression of the cauda equina
    - Common in working breeds, particularly German Shepherds and Labrador Retrievers
2. **Intervertebral Disc Degeneration/Protrusion (Type II IVDD)**
    - Chronic disc bulging at L7–S1 causing nerve root pressure
3. **Facet Joint Osteoarthritis**
4. **Lumbosacral Instability or Malalignment**
5. **Congenital abnormalities, neoplasia, trauma**

Clinical Signs and Presentation

- Lumbosacral pain (difficulty rising, reluctance to jump/climb stairs)
- Stiff gait or hindlimb ataxia
- Low tail carriage or pain on tail elevation
- Pelvic limb weakness or subtle proprioceptive deficits
- Incontinence (urinary ± faecal) in advanced cases
- Pain on lumbosacral extension or direct palpation

Symptoms can be chronic and insidious, often misdiagnosed as hip or stifle pathology.

Diagnostic Work-Up

- Neurological and orthopaedic exam (palpation, tail lift, extension tests)
- Lumbosacral radiographs (limited sensitivity)
- Advanced imaging:
    - **MRI** – gold standard for soft tissue and disc visualization
    - **CT scan** – for bony changes and canal narrowing
- Electromyography or nerve conduction testing (in select cases)

Treatment Options

Conservative Management:

- **NSAIDs**, gabapentin, or corticosteroids (for pain and inflammation)
- **Activity modification** and weight control
- **Structured physiotherapy and rehabilitation**

Surgical Management (for severe or refractory cases):

- **Lumbosacral decompression (dorsal laminectomy)**

Tel: 07772 369962 / Email: Olivia@goldenvetphysio.co.uk / Website: www.goldenvetphysio.co.uk

    - Removes pressure on cauda equina and nerve roots
- Stabilisation procedures (e.g., fusion techniques) in select cases

Role of the Veterinary Physiotherapist

Rehabilitation is crucial in both **non-surgical** and **post-operative** LS pain cases.

Physiotherapy Aims:

- Alleviate pain and inflammation
- Restore strength and mobility
- Improve spinal stability and core engagement
- Prevent compensatory issues (e.g., in forelimbs, hips)

Rehabilitation Phases and Priorities

Phase	Timeframe	Goals
Acute	0–2 weeks	Pain control, gentle mobility, reduce neural tension
Subacute	2–6 weeks	Core engagement, dynamic stability
Recovery	6–12+ weeks	Strengthening, proprioception, return to function

Core Physiotherapy Interventions

- **Manual therapy:** myofascial release, mobilization
- **Core strengthening:**
    - Sit-to-stand transitions
    - Peanut or wobble board balance work
    - Controlled hill walking
- **Stretching and ROM exercises** (targeting hamstrings, iliopsoas)
- **Neuromuscular electrical stimulation (NMES)** for muscle recruitment
- **Laser therapy or PEMF** for pain and inflammation control
- **Hydrotherapy:** Low-impact spinal extension with buoyancy support
- **Gait retraining:** Controlled leash walks, gradually increasing duration

Key Physiotherapy Objectives

- Reduce **nociceptive pain**
- Restore **pelvic limb strength** and **core stability**
- Improve **lumbosacral range of motion** and mobility tolerance
- Prevent **secondary musculoskeletal compensations**
- Provide **owner education** on safe home exercise, posture, and environment

Lumbosacral pain is manageable with a multidisciplinary approach. Early diagnosis, structured rehab, and tailored long-term care significantly improve patient comfort and function.