



## **Epidural injections for lumbar radiculopathy or sciatica: A comparative systematic review and meta-analysis or Cochrane Review**

Manchikati L. et. al. 2021, Pain Physician; 24:E539-E554

### **KEY POINTS:**

1. Lumbar radiculopathy produces significant leg pain that prevents many patients from regular ADL, Works and social functioning.
2. Epidural injections may include local anesthetic and/or corticosteroid formulations.
3. This review of 21 RCTs with one negative or inconclusive trial, showed Level I for short and long-term improvement for epidural injections with local anesthetic with steroids and Level II with local anesthetic alone.
4. Advanced Physiotherapy Practitioners may wish to refer persistent lumbar radiculopathy patients for epidural injection for uncontrolled radicular pain.

### **BACKGROUND AND OBJECTIVE:**

Epidural injections are among the commonly performed procedures in managing pain secondary to disc herniation and radiculopathy with evidence demonstrated by multiple systematic reviews of controlled studies and evidence-based guidelines (1-2).

**METHODS:**

The authors reviewed 2,100 articles using the PRISMA criteria to select 21 studies. RCTs with a placebo control or an active control design, performed under fluoroscopic guidance, with at least 6 months of follow-up were included. The outcome measures were pain relief and functional status improvement. Significant improvement was defined as 50% or greater pain relief and functional status improvement.

**RESULTS:**

Based on the qualitative synthesis of evidence of 21 RCTs with one negative or inconclusive trial, the evidence is Level I for short and long-term improvement for epidural injections with local anesthetic with steroids and Level II with local anesthetic alone.

**DISCUSSION:**

Epidural injections with or without steroids for radiculopathy showed significant effectiveness for local anesthetic with steroids and strong evidence with local anesthetic alone. Physiotherapists working in Advanced Practitioner roles should consider referral for epidural injections for uncontrolled radicular pain.

**REFERENCES:**

1. Manchikanti L, et al. Epidural interventions in the management of chronic spinal pain: American Society of Interventional Pain Physicians (ASIPP) comprehensive evidence-based guidelines. *Pain Physician* 2021; 24:S27-S208.
2. Knezevic N, et al., Lack of superiority of epidural injections with lidocaine with steroids compared to without steroids in spinal pain: A systematic review and meta-analysis. *Pain Physician* 2020; 23:S239-S270.