

Management of acute lumbar disc herniation with radicular pain.

This document is designed to provide an up to date guideline for the management of acute lumbar disc herniation with radiculopathy. Please note that recommendations need to be considered with reference to the individual patient.

Conservative management is considered appropriate in the first instance in the event that red flags such as suspected **infection, malignancy or cauda equina syndrome** have been ruled out. In the event that progressive or severe motor deficits are present, it is appropriate to refer for neuroimaging and for surgical intervention to follow.

For those cases of acute disc herniation with radiculopathy and mild or no motor deficits, a conservative approach is appropriate. Failure to respond to such conservative approaches may mean that more invasive approaches could be considered. The guidelines below are structured in such an order:

- Advice to stay active (not bedrest)
- Appropriate gentle exercise according to the patient's level of function may be trialed. There is little evidence for their efficacy in these instances however they are unlikely to cause harm. It may come down to individual patient preference and accessibility to appropriate exercise equipment.
- Medication including paracetamol and NSAIDs. Recent evidence suggest that paracetamol may be of minimal benefit but combining it with NSAIDs can be helpful.
- Consider the use of a weak opioid in the event that paracetamol and/or NSAIDs are not helping or are contraindicated. Ensure appropriate review and withdrawal of this as pain decreases and function improves.
- Gabapentin or Pregabalin may be helpful if used early to reduce neuropathic components of the pain. High doses might be required in order to achieve satisfactory pain relief. The side effects of such high doses might not be tolerated by patients and they may choose to discontinue use.
- Oral prednisolone in a short course may be helpful in improving function but not necessarily pain
- Epidural steroid injections with the addition of lidocaine may be effective at reducing pain and improving function. Repeat injection may be required although the data on multiple injections is not comprehensive.
- In the event that such non-surgical treatments fail, it is appropriate to refer for nerve conduction tests. If these are diagnostic then surgery can offered as an option for the patient
- It is important to evaluate the patient for levels of distress prior to choosing surgery as an option. Patients with higher levels of distress tend to have poorer outcomes following surgery. In these patients it may be appropriate to refer for concurrent psychological management or include education and reassurance as part of the treatment. A team care arrangement may be appropriate and should include appropriate rehabilitation and follow up.
- Surgical options include microdiscectomy, surgical decompression (laminectomy). There is some evidence to suggest that in minimally invasive surgery done on patient with lumbar disc herniation presenting with leg pain from diagnosed nerve root involvement gives slightly better outcomes for pain and function at three months compared to patients who have no surgery, however there is no difference between the two groups at 12 months.

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