

ESM

Efektiivsus:

Antud meetod on mainitud viimases USA ravijuhendis ägeda ja kroonilise alaseljavalu raviks, radikulaarse komponendiga ja ilma (Adult Acute and Subacute Low Back Pain /March 2018)

difinitsiooniga:

Epidural steroid injections may be used as an adjunct treatment for acute and subacute low back pain with a radicular component to assist with short-term pain relief.

Quality of Evidence: **Moderate**

Strength of Recommendation: **Strong**

Põhjendus:

The recent literature reviews on epidural steroid injections are mixed, with significant differences in methodology. Most studies focus on chronic low back pain. In a 2015 technology assessment of 23 RCTs, Chou et al. concluded that epidural corticosteroid injections for radiculopathy are associated with immediate improvements in pain and might be associated with immediate improvements in function, but benefits are small and not sustained, and there is no effect on the long-term risk of surgery (Chou, 2015). Moreover, the effectiveness did not seem to vary based on injection technique, corticosteroid, dose or comparator (Chou, 2015). For nonradicular back pain and spinal stenosis, there was limited evidence that epidural steroid injections are not effective (Chou, 2015). In addition, they found that there were no serious adverse events and few harms associated with epidural steroid injections, although for some studies, methods for assessing harms were not always well reported and harms data was sparse (Chou, 2015).

A comparative systematic review and meta-analysis of 39 RCTs found that for radiculopathy or spinal stenosis, injections with sodium chloride solution or bupivacaine were ineffective. However, lidocaine alone or lidocaine in conjunction with steroids were significantly effective for pain and function with a minimum 12-month follow-up (Manchikanti, 2016).

Given these conflicting evidence reviews, it appears the magnitude of benefit of epidural steroid injections is unclear. However, with low risk of serious adverse events, the work group concludes that epidural steroid injections may be used as an adjunct treatment for acute and subacute low back pain with a radicular component to assist with pain relief.

Consider epidural steroid injections after initial appropriate conservative treatment program. How long to wait until offering an injection is a matter of clinical judgment. For instance, in cases of severe symptoms, injections are often performed earlier in the treatment course. If the patient responds to the epidural steroid injection, it may allow him or her to advance in a nonsurgical treatment program and avoid surgery. It is generally agreed that if possible, epidural steroid injections should not be used as a monotherapy. Patients should be

made aware of the general risks of short- and long-term use of steroids – particularly temporary alterations in glucose control.

It is now considered standard of care to perform the injections under image guidance and with contrast in order to deliver the injectate as close to the disc herniation, area of stenosis or nerve root impingement as determined by advanced imaging.

Samamoodi antud soovitud ESM kasutamiseks **NICE guideline: Low back pain and sciatica in over 16s: assessment and management** difinitsiooniga:

36. Consider epidural injections of local anaesthetic and steroid in people with acute and severe sciatica.

37. Do not use epidural injections for neurogenic claudication in people who have central spinal canal stenosis.

Põhjendus:

Overall, the GDG considered that epidural injection, whether administered under image guidance or without, is a relatively safe and routinely used procedure, and had some evidence demonstrated by placebo-controlled trials for effectiveness in pain relief for epidurals of local anaesthetic and steroid. There was insufficient/ lack of evidence for effectiveness to support epidural injections using anti-TNF. The studies were conducted in small populations who had at least moderately severe sciatica and did not have further treatment options available to them (other than surgery). The evidence reviewed by the GDG suggests that epidural injection of local anaesthetic and steroid may reduce the number of people who would require surgical intervention. This evidence was reinforced by evidence from 2 trials that were included in the spinal decompression review that compared decompression to epidurals showing that 50% of people who had an epidural did not go on to have surgery. The group therefore agreed that in acute, severe sciatica where patients would otherwise be offered surgery, an epidural injection of local anaesthetic and steroid should be considered. The group discussed the evidence that had been conducted in sciatica patients with central spinal canal stenosis. The populations studied comprised people with neurogenic claudication primarily. There was insufficient evidence that epidural injections of local anaesthetic and steroid were effective in this group of people and it was noted that current opinion also reflects this. The group therefore agreed to make a recommendation against using epidurals in people with claudicant leg symptoms caused by central spinal canal stenosis. The GDG discussed that the purpose of this review had been to determine efficacy of different injectates, rather than comparing image guided to non-image guided injections. However, the stratification of the review by those delivered under image guided to those that weren't did not demonstrate a clear indication of improved efficacy of image guided epidurals over non-image guided. They therefore agreed that a research recommendation was warranted in this area.

Ohutus

The group discussed the risks associated with the different routes of administration of an epidural. The opinion of the group was that serious complications are very rare. The most common adverse event was a temporary increase in pain which the GDG considered could be outweighed by the potential benefits. The group discussed that there is some guidance in the UK suggesting epidurals should be given under image-guidance based on safety grounds, although there was limited evidence for a difference in effectiveness of image guided compared to nonimage guided epidural injections from this review. It was therefore agreed that a recommendation for future research should be drafted to ascertain the evidence base for safety and effectiveness for image guided and non- image guided epidural injections.

Kirjandus:

1. Epidural Corticosteroid Injections for Radiculopathy and Spinal Stenosis: A Systematic Review and Meta-analysis. Chou R, Hashimoto R, Friedly J, Fu R, Bougatsos C, Dana T, Sullivan SD, Jarvik J. *Ann Intern Med.* 2015 Sep 1;163(5):373-81. doi: 10.7326/M15-0934. Review.
2. Manchikanti L, Knezevic NN, Boswell MV, Kaye AD, Hirsch JA. Epidural Injections for Lumbar Radiculopathy and Spinal Stenosis: A Comparative Systematic Review and Meta-Analysis. *Pain Physician.* 2016 Mar;19(3):E365-410. Review. PubMed.
3. ICSI Health Care Guideline: Adult Acute and Subacute Low Back Pain. <https://www.icsi.org/wp-content/uploads/2019/01/March-2018-LBP-Interactive.pdf>
4. de Campos TF. Low back pain and sciatica in over 16s: assessment and management NICE Guideline [NG59]. *J Physiother.* 2017 Apr;63(2):120. doi: 10.1016/j.jphys.2017.02.012. Epub 2017 Mar 7. PubMed PMID: 28325480.