



Corticosteroids for radicular pain: Systemic or epidural?

In the present issue the use of corticosteroids for radicular pain is studied from different perspectives.

Gall et al. [1] performed a systematic review on systemic steroids for cervical radicular pain. They found 1 RCT with positive effect of oral steroids over placebo in patients with acute cervical radicular pain.

This positive outcome is in sharp contrast with the negative evidence for lumbar radicular pain. A recent Cochrane analysis [2] stated that systemic corticosteroids are slightly effective at improving short-term pain and function in people with radicular low back pain. However, this is based on a mean difference compared to placebo of 0.56 points out of 10. The same institution has also made a systematic review on the use of NSAIDs for sciatica in 2017 [3] They found that the efficacy of NSAIDs for pain reduction is comparable to that of placebo, with a mean difference of 4.56 points out of 100. Why a similar result crystalized in one Cochrane review in a negative result for NSAIDs and another review in “slightly effective” for systemic steroids, is unclear.

In daily practice the use of interlaminar epidural corticosteroids for subacute cervical radicular pain, not responsive to conservative treatment, is still a standard of care. This is why the survey of Gebrekristos et al. [4] on practice patterns of interlaminar epidural steroid injections (ILESIs) offers an interesting perspective on daily practice. The authors questioned about imaging, sedation, imaging guidance, accessing epidural space, the use of contrast, type of corticosteroids, ...

Dexamethasone (10mg) is increasingly used, especially (52.4 %) for the cervical region, while for the lumbar region methylprednisolone (44.2 %) holds its position as the steroid of choice. It is not clear why dexamethasone has been given priority for cervical ILESIs since there is currently no clear evidence in favor of switching to dexamethasone for cervical ILESIs. Strange enough the majority of providers chooses for methylprednisolone a dose of 80mg, which is higher than the recommended effective dose. Most physicians limit the total volume injected (steroid, saline and/or anesthetic) to 3 ml in the cervical epidural space, although recommendations to limit the volume are only quite recent [5]. Striking is the fact that a small group clearly fails to adopt recommendations and used sedation as a standard of practice >75 % of the time (12.24 % of the respondents) and in 13.1 % advanced imaging was not required prior to a cervical epidural injection. Especially the latter should be mandatory since review of imaging before cervical ESI could prevent severe complications [6].

The same group [7] also held a survey on the topic of transforaminal epidural steroid injections (TFESI), with a clear trend to use dexamethasone both cervical (91,2 %) as lumbar (74,5 %) and with a majority using a 10mg dose. Also here divergent practice to consensus recommendations exist with 11.8 % of the respondents not requiring advanced imaging before TFESI, 5.9 % of respondents using sedation

>75 % of the time and 9 % reporting the use of particulate corticosteroids for cervical TFESI.

In summary the use of dexamethasone has been widely implemented but, in both publications, authors conclude that variability in practice continues to exist, despite consensus recommendations. They suggest that further educational efforts and clarification of existing guidelines are needed. Apparently, adaptations to the consensus guidelines may be easier for newer interventions and medications instead of older ones.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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