



Title Cost Effectiveness and Safety of Epidural Steroids

in the Management of Sciatica

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Aim

- To verify, with an adequately powered study, the clinical effectiveness of epidural steroid injection (ESI) in treating sciatica
- To identify potential predictors of response to ESI
- To investigate the safety of lumbar ESI in patients with sciatica
- To evaluate the cost effectiveness of lumbar ESI.

Conclusions and results

Epidural steroid injection led to a transient benefit in ODQ and pain relief, compared to placebo at 3 weeks (p=0.017, NNT=11.4). There was no benefit over placebo between weeks 6 and 52. Using incremental QALYs, this equates to an additional 2.2 days of full health. Acute sciatica seemed to respond no differently from chronic sciatica. There were no significant differences in any other indices, eg, objective tests of function, return to work, or need for surgery at any point in time. There were no clinical predictors of response although the trial lacked sufficient power to be confident of this. Adverse events were uncommon, with no difference between groups. Costs per QALY to providers under the trial protocol were £44 701. Costs per QALY to purchasers were £354 171. If only one ESI was provided, then costs per QALY fell to £25 745 to the provider and £167 145 to the purchaser.

Recommendations

Cases of sciatica that present to secondary care produce major long-term morbidity. These patients have severe disability and distress, with a major impact on social functioning. The vast majority of these cases fail to respond to current conservative measures. ESI offers no sustained benefits to patients with sciatica in terms of pain, function, or need for surgery. We found no evidence for repeat injections in the short term, nor for their use early on in the care pathway. They do not prevent surgery. They appear relatively safe. ESI fails the QALY threshold recommended by NICE.

Methods

A pragmatic, prospective, multicenter, double-blind, randomized, placebo controlled trial with 12-month followup.

Further research/reviews required

Further work on the epidemiology of radicular pain is needed so that patients can be presented with better information on prognosis. ESI should be evaluated as part of a structured multidisciplinary approach. Better analgesic strategies are needed, combined with specialized rehabilitation. A register of all epidural steroid injections should be developed so that the true incidence of major complications can be accurately determined. Subgroups who may benefit from ESI should be identified. The use of radiological imaging and better assessment practices should be evaluated. Cost-utility data from other treatments should be compared.