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Point of View: Minimally invasive decompression versus X-stop in Lumbar Spinal Stenosis: A randomized controlled multicentre study

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This study reports on a randomized control trial comparing interspinous spacer with a minimally invasive decompression for spinal stenosis with neurogenic claudication relieved with spinal flexion. The study was well designed but unfortunately enrollment was stopped early due to a high reoperation rate in the interspinous spacer group seen at interim analysis. While the interim analysis was pre-planned, there do not appear to have been aprior stopping rules. This is unfortunate because despite the high reoperation rate in the spacer group, patient reported outcomes were similar between the two groups at all timepoints. As a result, this study does not particularly add to our knowledge of the proper role for interspinous spacers in lumbar spinal stenosis.

The significant complication rate from interpinous spacers appears to be quite low but the proportion of patients who fail to improve and go on to lumbar decompression surgery in several studies appears to be in the range of 15 – 30%.¹⁻⁴ The question remains unanswered, however, as to whether the trade-offs of a less invasive initial procedure with low complication rate are worth it given that rate of conversion to a second surgery. The answer will no doubt depend on individual patient risk factors, whether the procedure is done under general or local anaesthesia, whether they stay in the hospital for a couple days, as in this study, or the spacer is done as an ambulatory procedure, and what the relative costs are. Unfortunately, this study, in part because it was stopped early and was therefore significantly underpowered, does not particularly help get us closer to the answer.

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