



Letter to the editor regarding “decompression alone versus decompression plus fusion for lumbar spinal stenosis with degenerative spondylolisthesis”: when do we have enough evidence?

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With great interest we read the systematic review and meta-analysis as published by Shen *et al.* on the effectiveness and safety of decompression alone versus decompression with fusion in patient with lumbar spinal stenosis with degenerative spondylolisthesis (DS) (1). Based on their analysis of 12 original articles, 14,693 patients were included in the study. The authors conclude that in patients with lumbar spinal stenosis and DS, the effectiveness and safety of decompression alone was superior to decompression with fusion in terms of complications, duration of surgery and amount of bleeding, but that more high-quality literature is needed. The authors are to be commended for their work on this controversial topic. Even though their work is interesting, there are some issues in both methodology and consequent interpretation that need to be discussed.

Aside from minor issues such as that the review was not registered a priori, there is one major issue with the methodology. In the methods section it becomes apparent that published randomized controlled trials (RCTs) were omitted for this review for unclear reasons. RCTs are by far, the study design of choice to generate evidence when one intervention is compared to another. Because of the randomization confounders, both known and unknown, are

evenly distributed in both treatment groups. RCTs, therefore, usually have a low risk of selection bias or confounding by indication (2). By excluding RCTs for their meta-analysis, the conclusions that are drawn are only based on a small part of the literature while the part of the literature with high quality evidence is not incorporated in the review (3,4). Therefore, we as readers, are unsure if we agree with the authors of review if more high-quality literature is needed to confirm the best treatment choice in patients DS, as the high-quality literature was omitted for this review.

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Footnote

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