Minimum clinically important change (MCID) of Oswestry Disability Index (ODI) score

Dear Sir,

I would like to acknowledge Gaetani et al. for their excellent study assessing functional outcome after instrumented stabilization for lumbar degenerative spondylolisthesis (1). I wish to point out an interesting aspect of the methods used in this study.

The average pre-operative Oswestry Disability Index (ODI) score in this study of 76 patients was 49.4 and average Roland Morris scale (RM) score was 14.2, which suggests a cohort of significantly disabled patients. It is known that ODI is more sensitive than RM to functional changes in more severely disabled patients (2). This is typically reflected in this study, as 27% of patients recorded unchanged RM scores, whereas only 8.6% recorded unchanged or worse ODI scores. However, interestingly this difference was not observed in the patients who showed a significant change in their scores: 55.7% of patients had a significant reduction in ODI score, which is similar to, indeed, slightly less than the 59.4% of patients who showed a significant RM score improvement.

This could be explained by the authors’ criteria for clinically significant change. In this study, the authors considered an improvement (reduction) of more than 20 points as a clinically significant score change in the ODI score, and of more than 5 points in the RM. However, current literature suggests that in spinal fusion for low back pain the minimum clinically important change (MCID) in ODI is 10 points (3). With regard to the RM score, the literature reports 5.2 points as the MCID (4), which was indeed adhered to in this study.

I recognize that this aspect of the methodology would have no influence on the final conclusion regarding the outcome of surgery in the patients in this study. However, it could influence the size of the effect for future reference. I would like to know the author’s opinion on this aspect of the study.

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References