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Comment to “The clinical importance of changes in outcome scores after treatment for chronic low back pain” by O. Hägg et al.

In an era of limited health care resources, restrictions on access to various medical treatments may soon become an important matter of debate. Key points in this debate will be related to the patient's subjective and objective functional improvement due to the treatment.

In recent years, much research has gone into developing and evaluating appropriate instruments to assess outcome. At the same time, a consensus has developed among clinicians and researchers over the finding that the classic subjective and objective grading of the treatment result as “excellent, good, fair and poor” is insufficient for a valid and reliable outcome assessment. Nevertheless, many clinicians agree on what comprises an excellent result (i.e. pain free, working full time, no medication, no functional limitations) and what comprises a poor result (i.e. severe pain, work incapacity and severe functional limitations). The advantage of this simple grading system is that the clinical meaning of

the scores and effective changes (e.g. from poor to excellent) are fairly obvious. Less consensus is evident regarding “good and fair” results, because these categories are more difficult to define in a universal manner. Meanwhile, more detailed and comprehensive outcome instruments such as the visual analogue scale, the Oswestry Disability Index (ODI) and the Zung Depression Scale have been introduced in the spinal field, and are nowadays widely used to assess and report outcome. Numerous papers report that a certain study population demonstrated a statistically significant therapy-related improvement in such scores, and thereby argue in favour of the treatment modality. However, these outcome instruments often disguise how the patient is actually doing. A group of chronic low-back pain patients may significantly improve, by an average of 15–20 units on the ODI, but may still be severely incapacitated by pain and unable to work. This exemplifies the need for a better understanding of the meaning of specific outcome score values and the clinical significance of changes resulting from treatment.

In the preceding article, Hägg et al. have addressed this important issue in relation to three widely used multi-item outcome instruments and the visual analogue scale, by estimating the minimal score changes that can be considered to be clinically

important, and attempting to describe the clinical meaning of those score changes. The authors emphasised that the treatment-related score changes may not even significantly exceed the measurement errors. Most interestingly, Hägg et al. reported that in cases where, despite significant improvement, crucial functional characteristics such as the ability to sit, stand and lift remain a significant problem after treatment, these remaining functional limitations are not evident from the scores.

There is a need not only to develop and validate multi-item functional, psychosocial- and health-related quality of life outcome instruments, but also to improve the illegibility of the score values and the clinical relevance of changes due to treatment. In this setting, the authors can be congratulated for their work investigating the clinical relevance of such score changes. In the near future, however, the more pressing task will be to demonstrate that the treatment in question actually reduces health care costs. New instruments related to health care consumption (e.g. number of visits before and after treatment, need for continued non-operative treatment and medication despite surgery) and socio-economic outcome (e.g. continued work loss, invalidity pension despite surgery) are required to demonstrate that spinal surgery is cost-effective in selected patients.

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