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Accuracy of the clinical examination to predict radiographic instability of the lumbar spine

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The authors must be congratulated for asking whether clinical assessment of a patient with low back pain may predict radiologic instability. Since undisputed radiologic criteria for defining instability are available, the authors' search for equally reliable clinical tests must be appreciated.

Yet, a few caveats must be borne in mind when reading this paper.

Such predictive clinical tests should be both sensitive and specific. They should have a high intraobserver and interobserver reliability to warrant their recommendation because in a clinical setting an independent and blinded assessment by two or more examiners is seldom feasible. In what other way could cases be properly classified, if the involved observers disagreed too often?

Out of the many clinical and biometric items assessed, only a very few were predictive (one should better say indicative) for radiologic instability. The most indicative, namely lack of segmental hypomobility, showed a high interobserver variability (only 77% agreement between two observers in a subset of just 38 patients) and, from clinical experience, there is some suspicion of it also having a high intraobserver variability. If combined with variability regarding lumbar flexion, the sensitivity of these two tests went down to only 29%.

The other result, namely the fact that older patients showed lesser

ROMs, could be expected. This has previously also been reported on the basis of in vitro and intraoperative findings. But primary instability in the elderly as a cause for back pain-related intervention is far less common than other causes: e.g., facet joint degeneration, stenosis, and maybe instability after surgical decompression itself.

For symptomatic patients, decision-making about surgical intervention should not be based solely on X-rays and clinical evaluation. We also have to be aware that radiologic instability is not necessarily correlated with clinical symptoms. So, at this point, the paper must not be misinterpreted so as to deprive patients with symptoms (yet without radiologic instability) from stabilizing treatment options. Instability is not the only cause for low back pain—as we all know, particularly from older patients. Decision-making should rely on more than the evidence of two combined clinical tests which had to be selected quite arbitrarily from the wide field of (manual) tests available.

The authors' efforts, however, are to be highly praised, and their work in this field is truly innovative. Their small series shows us the need to validate our related clinical findings on a larger scale, be it by comparison with radiologic diagnostics and/or through standardized intraoperative evaluation of segment stability.

The article to which this comment refers can be found at <http://dx.doi.org/10.1007/s00586-004-0803-4>.

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