Researchers' report:

Title: Assessment of nerve involvement in the lumbar spine: association between magnetic resonance imaging, physical examination and pain drawing findings

Version: 4 Date: 30 April 2010

Reviewer: Charlotte Leboeuf-Yde

Hallo again,

This manuscript is still clearly and beautifully written. The topic is relevant and the contents interesting. Most of my questions have either been clarified or it has been successfully explained why my comments fell by the side.

However, I shall insist that you relate this text to the fact that your study sample largely consists of patients with very long-standing leg pain. Almost by definition, one would expect that the original discal bulge or protrusion has been dissolved. One would also not be surprised that a certain proportion of people with past nerveroot conditions (caused by the disc protrusion) WILL KEEP ON HAVING SYMPTOMS AND SIGNS OF THE ORIGINAL INJURY. My suggestion is that you insert the words "with long-standing nerve root symptoms" in your first sentence under the conclusion, and where ever else you conclude your results. Also in the descriptive text in the first paragraph of your result section, please give us the percentage also of long-standing leg pain (can be seen in your table) but please do yourselves the favour of informing the reader that you understand this concept.

I do sympathize with your approach to give these patients the benefit of the doubt and I know the effect the non-specific label will have on some patients if it is not explained properly to them, but there is no need to deny the clinical reality.

Also, I think that you will do yourselves a favour as clinicians, if you mention clearly that normally a diagnosis is not made on the basis of single tests BUT ON THE OVERALL CONSLUSION BASED ON THE WHOLE PICTURE.

Further comments:

I still do not understand the sentence: "Each radiologist made independent assessments that were repeated before and after reading the patient's history from the referring physician". I can see from your comments that you do not understand what I mean. What I mean is: Did each radiologist read the same image four times? You did an interexaminer test. But did you also do intra-examiner tests? Did you REPEAT the test before the reading and did you REPEAT it again after the reading? I cannot work this out from your repeatability results. Or do you mean that there was one repetition, i.e. 2 times for each radiologist. Or does it have to do with another person doing the reading.
as well as both before and after the reading of the report or what? I am completely confused, although this is of course only a minor detail.

P.7 line 8, "Visible nerve involvement resulting from spine processes were assessed subjectively and noted separately on each protocol" meaning what?

P.11 lines 6 and 17. Adding the words "MRI-defined" before the words "nerve involvement" would improve the reader's understanding of the text.

Same page, line 20, a comma has moved too far to the right.

P.12 lines 13, 15, and 24. Check with a native speaking person if you can use the word "assessed". I would have thought you mean "defined".

P.15 line 19. does not the word "cause" need inserting after the words "previous disc herniation"?

Same page line 16 "prevalence's" should read "prevalences", plural not genitive, and I saw this error somewhere else in the text. (p.20, line 2)

That very sentence is four lines long, very heavy and could perhaps be simplified, cut in two or something. The last comma in that sentence is without justification.

Table 2, at the top: discoligament "protrusion" not "protrution".

At the bottom, all positive findings grade 2 or more. You did not have any "or more" in your original radiologist checklist. The same "or more" is found in several tables.

"toracic" should be "thoracic" and the same error is found in several tables.

Looking forward to reading it in the journal shortly!

Kind regards
Charlotte

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.