Reviewer’s report

Title: Objective and Subjective Assessment of Sleep in Chronic Low Back Pain Patients Compared with Healthy Age and Gender Matched Controls: A Pilot Study

Version: 1 Date: 11 April 2009

Reviewer: Elena Calandre

Reviewers report:

This is a nice a well-designed study whose main drawback, which the authors acknowledge, is the small sample size. However, this is not excessively important, given that it is a pilot study which is currently being extended.

Minor essential revisions:

- As the authors state in the introduction, most of the studies concerning chronic pain and sleep have been done in heterogeneous samples of patients. For this reason, I think that they should mention, both in the introduction and in the discussion, the data recently published by Marty et al (Eur Spine J 2008; 7:839-844) who performed a case-control study centred in subjective pain quality in patients with chronic low back pain.

- I have found odd that none of the CLBP patients, complaining of poor sleep, took any kind of sleep pill. Do the authors know the reason of this finding? If yes, it would be interesting to introduce in the discussion some comment at this respect.

- page 6, line 2: this is just a cross sectional study; there is not such thing like a “cross-sectional prospective study”. I suppose that the authors included the word “prospective” because the actigraphy was measured during three nights but this fact do not imply that the study was prospective, since the objective was to assess more accurately the actigraphic data. The word “prospective” should be suppressed.

- page 14, lines 20-21: The authors state that “there was no relationship between pain or disability, and objectively measured sleep”. However, in a Table 5, a strong correlation between WASO and pain severity (r=0.735, p<0.01) is shown. Explain the discrepancy.

- page 18, lines 1-2: the authors refer to discrepancies between objective and subjective sleep measure in adult patients with cystic fibrosis; however, the quoted reference refers to fibromyalgia.

- page 19, lines 18-19: references 41 y 42 do not exist; the authors probably refer to references 35 and 36 which are not quoted in the text.

- references 28 and 29 are not quoted in the text

- page 10, line 4: there is not any reference 44; insert the correct reference number or delete
- reference 9: 2 is the issue and 1 the volume; accordingly, 1 should be written instead of 2

Discretionary revisions:
- page 4, line 2; insert an “an” after “this requirement is”
- page 4, line 11 and page 7, line 2: LBP should be changed by CLBP.
- page 4, 3rd paragraph, line 14: insert “that” after “recommends”
- page 4, 3rd paragraph, line 16: there is not any reference 41; insert the correct reference number or delete; “assesses” must be changed by “assess”
- page 4, line 18: insert “to” before “expand”
- page 8, line 3: substitute “sleep, and SE defined” by “sleep. SE was defined”
- Table 1: below “gender” change “% female” by “%(n)”
- Table 4: legend should state either “objectively and subjectively measured sleep variables” or “objective and subjective sleep variables”

Level of interest: An article whose findings are important to those with closely related research interests

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