Reviewer’s report

Title: Biological inflammatory markers mediate the effect of preoperative pain-related behaviours on postoperative analgesics requirements

Version: 1 Date: 25 Sept 2015

Reviewer: Argyro Fassoulaki

Reviewer’s report:

The authors evaluated the Situational Pain Scale (SPS) and the neutrophil to lymphocyte ratio (NLR) individually and in combination with other variables as predictors for the analgesic demands during the first 48 hours after laparoscopic cholecystectomy

Introduction

Page 3

- Lines 22-25:"In this study we shall use...". You have already done the study change to: "In this study we implemented a new questionnaire..."

- Line 39: Study hypothesis is missing. Before the aim of the study add the study hypothesis.

Methods

Page 4

- Lines 7-9: Sample size calculation is not clear. Was power analysis done to confirm the adequacy of the sample size after study completion? Please describe the sample size calculation you did in detail.

- Line 40: "at rest and during movement". Be specific, what movement?

- Lines 57-60: Is the number of times the patient requested analgesic a validated method to quantify the analgesic requirements instead of recording the cumulative analgesics consumed over a certain period of time postoperatively?

Results

Page 8

- Didn't you have dropouts? Did you collect data from the 60 patients with no missing values? In any case you must mention in the beginning of the Results section if you had missing values and patient dropouts. Otherwise make the statement that all the 60 patients completed the study and no missing values were in the collected data.
Discussion

In a paragraph before the conclusion give the strengths and limitations of the study.

Table 1. Rearrange the rows in a logical order: first the patient characteristics then the variables you studied in a chronological order. Patients' BMI and statistical comparisons between low and high consumers must be calculated and included in table 1. In the exclusion criteria you did not consider obesity and analgesic pharmacokinetics vary between patients with variable BMIs. Also in a footnote explain all the abbreviations included in table 1.

Argyro Fassoulaki MD, PhD, DEAA

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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Needs some language corrections before being published
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