Reviewer’s report

**Title:** General vs. neuraxial anaesthesia in hip fracture patients: A systematic review and metaanalysis

**Version:** 0  **Date:** 26 Feb 2017

**Reviewer:** Carlos Errando

**Reviewer's report:**

The authors carried out a systematic review and meta-analysis on the anesthetic management of hip fracture patients, comparing general vs. regional anesthesia.

The authors found no differences in outcomes, except in length of stay, but a high risk of bias in the studies was detected. RCT and observational studies were included.

The authors follow an adequate description of the methods used, as well as the criteria for studies to be included.

Methodology of meta-analysis is clearly reported.

**Major comments:**

As per "definition of inclusion criteria", perhaps the manuscript would be better described (and entitled) 'general vs regional neuraxial anesthesia', instead of '...regional anesthesia'.

Important outcomes other than mortality were not addressed, as pulmonary embolism, cardiac or respiratory complications, etc.

It can be criticized that studies included a wide age range of patients, instead of only elderly patients (a more outcome-centered population, for instance >65 year-old). However it can be argued that this depends on the original studies included.
Minor comments:

Please report homogeneously the authors citation along the text, i.e. Shih and colleagues (reference),... not ...and others.

Page 3, line 59-60: it is unclear to which population these number refer to (world wide population? population quoted in one of both references?)

Page 4, lines 71-72: ref 24 lacks

Page 7, lines 139-142: please modify, ...sample sizes in the included studies varied widely, the largest one including 73284 patients (ref), and the smallest one 45 patients (ref).

Line 145: ...confounding factors (refs).

Line 146: ...a high risk of bias, because...

Point 3.3: perhaps this paragraph would offer better comprehension if reported as a table only (with a brief introduction at the start of the paragraph)

Page 9, lines 173 anf following: please rewrite, ...We performed a separate subgroup analysis of the ten retrospective observational studies and the two RCT studies.

lines 183-184: ...Shih and colleagues (n=335,...); the same in lines 193 and following (Le-Wending and colleagues. patorno and colleagues,...)

Page 11, line 213: ...There was no heterogeneity

Page 13, line 254: ...furthermore only 2152 patients...

line 255: ...difference, instead of ...disction (mistake ??)

Page 14, line 256: ...included, instead of ...concluded
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

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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