Reviewer's report

**Title:** Continuous spinal anaesthesia versus ultrasound-guided combined psoas compartment-sciatic nerve block for hip replacement surgery in elderly high-risk patients: A prospective randomised study

**Version:** 2

**Date:** 11 August 2014

**Reviewer:** Ali Fuat Erdem

**Reviewer’s report:**

I think minor essential revisions are required for publication on BMC Anesthesiology. After revision it might be published on the journal. My advises are listed below.

1- There is no information about sciatic nerve block in abstract, for example the amount of solution. Please write something about it.

2- The mixture of anesthetic solution is described as 10 mL 2% lidocaine + 1 mL 1:200,000 epinephrine + 19 mL 0.25% bupivacaine. I think there is something wrong with it. 1 mL 1:200,000 epinephrine means only 5 µgr epinephrine in 30 ml of solution. The solution should consist of 1:200,000 epinephrine which means 150 µgr in 30 ml. Please correct it.


4- In this study USG and stimulator were used together to confirm the nerves. Also it is expressed that the anesthetic solution was injected when muscle contractions were obtained with a current of 0.5 to 0.8 mA at a frequency of 1 Hz. It is advised to inject the solution between a current of 0.3-0.5 mA to get a more sufficient anesthesia. Why it is injected with a current of 0.8 mA. Is the reason the combination of current with USG?

5- In table one to for giving number and percentage information of additional diseases please write the percentage in brackets as it is shown Additional diseases n (%).

6- Emphasize the importance of this study that it is the first study in the literature comparing the CSA technique with the PCSNB technique with regards to hemodynamic effects in elderly high-risk patients in the last paragraph of introduction.

7- In discussion part at the end of the first paragraph it is written that the authors found similar anaesthesia quality between two groups. At the same time no patient had fentanyl propofol and midazolam requirements during surgery in the CSA group but all patients in PCSNB group needed continuing infusion of propofol at the speed of 10-50 µg/kg/min during operation. Also adequate anaesthesia in the majority of patients is 92.1% for PCSNB and 100% for CSA. Please explain this confusion.
8- The median level of sensory block was T9 in the CSA group and it was L2 in the PCSNB group. Please discuss if it might be reason of hypotension occurred in CSA group and more ephedrine treatment needed in this group.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.

I worked with some of the authors of the study about 4 years ago.