Reviewer's report

Title: Sciatic lateral popliteal block with clonidine alone or clonidine plus 0.2% ropivacaine: effect on the intra- and postoperative analgesia for lower extremity surgery in children. A randomized prospective controlled study

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Reviewer: Jean-Marc Malinovsky

Reviewer's report:

The work done is to evaluate the interest of clonidine administered in sciatic nerve block for postoperative analgesia after foot and ankle surgeries in children, and asked to parent their degree of satisfaction with the analgesic technique used. This topic is of clinical interest. The femoral nerve block was probably used to relieve pain of tourniquet application during surgery.

General comments

The standard for postoperative analgesia after ankle and foot surgical procedures is the sciatic nerve block with administration of local anesthetics, in adults as well as in children. In children some authors used a mixture of local anesthetics added clonidine, however the use of clonidine remains controversial. I agree that there is no consensus for perineural use of clonidine but its use appears to be frequent. Unfortunately, you didn’t compare perineural clonidine to a group receiving only local anesthetic. This would have evaluated the usefulness of clonidine by this route of administration.

You claimed that clonidine by sciatic nerve block gave an acceptable analgesia in comparison with ropivacaine added clonidine in the sciatic nerve block. No patient had sensory block in clonidine group. What would have the effects of systemic clonidine in such patients? A comparison to a group with intravenous clonidine alone would be useful.

Specific comments

The Methods section merits to be rewritten. You claimed to use a random table for allocation of patients, however the number of patients included in control group, clonidine and clonidine plus ropivacaine groups were 21, 23 and 22 respectively. This need to be explained. Seventy-seven children were scheduled during the period of the study, 11 were excluded because they didn’t meet the inclusion criteria. The writing of Method section is clumsy and can install any doubt for a real random allocation of children in groups.

There are too much tables and figures for the presentation of results. Table 2 gives no information about the relationship between quality of analgesia and the different stimulations observed during the localization of sciatic nerves. Results (mean±SD or median (range)) of Table 3 would be easily inserted in the text of
What is a “clinical acceptable analgesia”? the pain scores or the doses of analgesics as rescue? You chose the first analgesics request as main objective for the study. So you evaluated the duration of analgesia after sciatic nerve block, which was statistically shorter with clonidine (6h) than after ropivacaine added clonidine (24h). When we are looking the figure 2 pain scores remained low because 70% of patients received nalbuphine in clonidine group (only 20% in ropivacaine added clonidine group). So you can’t claim that clonidine administered alone by the sciatic nerve route gives a "clinical acceptable analgesia".

You can’t forget that clonidine is proposed as premedication to decrease agitation and nausea during the postoperative period in children even under regional analgesia. Such effects of clonidine would be discussed in the Discussion section.

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

**Quality of written English:** Needs some language corrections before being published

**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