Reviewer’s report

**Title:** Percutaneous radiofrequency lesions adjacent to the dorsal root ganglion alleviates spasticity and pain in children with cerebral palsy: pilot study in 17 patients

**Version:** 2  **Date:** 20 March 2010

**Reviewer:** Gunnar Hagglund

**Reviewer’s report:**

The authors have treated 17 children or young adults with cerebral palsy and severe hip flexor/adductor spasm with RF-DRG.

The 6 first children were evaluated using MAS and GMFM preoperatively and 1 and 6 months postoperatively. The following 11 children were evaluated using VAS, for spasticity, pain and ease of care.

In the first 6 children a small improvement was seen with MAS, not with GMFM. The improvement was more obvious after 1 month than after 6 months. Using VAS a more obvious improvement was seen in the last 11 cases.

Questions and comments:

1. The MAS was used in Group A. No child had been classified as level 1+. Was it the modified or the original Ashworth scale that was used, or had no child at any examination a level 1+ degree of spasticity?
2. In the Results, outcome of a caregiver questionnaire is presented, but the questionnaire is not mentioned in the Methods.
3. This caregiver questionnaire showed improvement in Group A. Why was it not used also for Group B?
4. Was Group B not analysed using MAS? These findings should also be presented, as one goal with RF-DRG is to reduce spasticity.
5. It seems that RF-DRG reduces spasticity for a period of time. In Group A the evaluation was done 1 and 6 months postoperatively. In Group B time between RF-DRG and evaluation is not mentioned. Ideally the results in this group should be presented also after 1 and 6 months postoperatively. If it is possible a one-year follow-up would be of great interest, to analyse the method in relation to botulinumtoxin treatment.
6. As the spasticity reducing effect with RF-DRG seems to be reversible, the analysis in the discussion should include both SDR/ITB and botulinumtoxin treatment.

**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