Reviewer’s report

Title: Comparison of Outcomes of Unilateral Recession-Resection as primary surgery and reoperation for Intermittent Exotropia

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Reviewer: Federico Velez

Reviewer's report:

Abstract

1. Surgical success was defined as exo- or esodeviation within 8 PD.

This definition is limited to a motor success. Authors have adjusted the success to be within 8 PD of eso-exo. But this is still a definition that may not be adequate for a patient with intermittent exotropia and foveal fixation who postoperatively resulted in a monofixational esotropia.

2. However, there was a significant difference in the mean angle of deviation between the two groups from postoperative 3 months to final follow-up (p<0.05): in short, group A had become more exotropic than group B. Also, the surgical success rate was higher in group B (80.0%) than in group A (47.7%) at final follow-up (p=0.002).

This statement is not clear. Are the authors referring to early postoperative follow up and final postoperative follow up? Please clarify and correct.

3. Unilateral R&R as reoperation presented better results for the surgical treatment of recurrent exotropia, showing a smaller exodrift pattern and higher surgical success rates compared with R&R as a primary surgery.

I am concern that authors compare two groups that cannot be compared.

Methods

4. In group B, the primary surgery for exotropia was unilateral lateral rectus recession (ULR) in 4 patients (10%)
Where those 10% patients also basic deviations before surgery 1. Those patients should be eliminated from the study

Authors should also include more comparisons. All (except those 4 patients that I recommend to eliminate) group B patients underwent R-R as the primary surgery as well. Similar to Group A patients. Authors must compare Group A and initial surgery Group B patients. Were groups similar.

5. Surgical success was defined as ocular alignment within 8 PD. Overcorrection was defined as esodeviation over 8

Same concern.

6. The primary outcome measures included the surgical success rates based on the postoperative angle of deviation at distance as well as the sensory status determined by Titmus stereotest and Worth-4-dot test (W4D), which were compared between the two groups.

Please clarify why only distance. When operating on patients with basic deviation one assume that the decision for surgery on the MR was also based on the near angle of deviation. Please also clarify if the sensory measurements were obtained for near or for distance.

Results

7. In both groups, postoperative stereoacuity, at each visit, was better than preoperative stereoacuity (p<0.05). At final follow-up, the mean stereoacuity was 55.65 ± 18.54 seconds in group A and 57.33 ± 19.07 seconds in group B (p=0.789). Fusion on Worth-4-dot test, at final follow-up, was observed in 60% of patients in group A and 52.9% of patients in group B, which difference was not significant (p=0.666).

There was a high rate of suppression which is unusual in patients with intermittent exotropia. (unless patient sensory status was measured at distance) 40% in Group A patients and almost 50% in group B patients. Was the sensory status measured preoperatively? This information is very important especially when presented data based on motor alignment.

Authors are not presenting data on postoperative alignment. How many patients were exotropic and how many patients isotropic postoperatively. And how many of those consider successful patients were over corrected postoperatively. And in how many of those patients the sensory status improved or deteriorated
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.

No

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?  
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I recommend additional statistical review

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