Aadenoidectomy efficacy on the extrusion of tympanostomy tube

Dear Editor

I read the article entitled "Effectiveness of adenoidectomy on tympanostomy tubes retention duration "written by Dr. M. Farhadi et al, published in MJIRI, in Nov 2011, Vol. 25, No. 3¹ with enthusiasm. However, I believe there are grave misconceptions and misinterpretations of materials and method in the article, which could misled the readers. Thus it needs to be revised again.

I) The author should reflect the view points of the oppositions and any opponent of this idea. There are some misleading usages of references. For example in reference11 in Dr. M Farhadi et al's article, Song et al found that children with history of initial tympanostomy tube (TT) insertion had a longer extrusion time. Also patients with serous effusion had the shortest extrusion time (1). Gleinser et al believe that adenoidectomy may decline the need of repeated TT (2). On the other hand several authors reported no difference between the extrusion time in patients who underwent adenoidectomy and those who did not (1,3,4). Moreover in the study by Yaman et al on 80 patients (92%) adenoidectomy or adenotonsillectomy, they inserted Shepard grommet with an average extrusion time of 8.5 months (5). As a result, the length of TT in Dr. Farhadi and coworkers' study is likely due to inclusion of different criteria. Subsequently it may not contribute to adenoidectomy or location of TT in this study whatsoever. Furthermore, the author should have paid more attention to what eminent otologists attest about site of TT insertion. Although, Shah agreed with anterior inferior quadrant insertion (6) nonetheless, Paparella believes that insertion of TT in posterior inferior quadrant can be dangerous for round window or dehiscent high jugular bulb. Also he found that the best position is anterior superior quadrant (7). In addition, some researchers reported that the site of TT is not an important issue (3, 8).

II) There is clearly a deviation between the main research questions proposed in the introduction vs. what was stated in the other part of the study. Furthermore there is no unity or cohesion with what stated in the abstract and the following paragraphs. Sometimes it was said that "To find out whether TT in different positions decrease the rate of retympanostomies" i.e. whether it declines the number of children with persistent otitis media with effusion or not. Surprisingly the aim of study was changed to "evaluation of adenoidectomy efficacy on the duration of tympanostomy tube vs. location in children with persistent or recurrent otitis media with effusion". Therefore readers may assume that the study made a comparison between adenoidectomy and location of TT. However, in the result section the author compared adenoidectomty with non-adenoidectomy group. Finally in the conclusion, the author recommended different shape or design of TT. As a result the main idea was not really discussed and it still remains an ambiguous issue.

III) There are some omissions and discrepancies in the method section. For example: How the results were acquired? Second, how long was the duration of follow up? Third the author did not explain why patients with serous fluid or recurrent TT insertion were excluded from the study. Forth, if the indication of operation was type B tympanogram with hearing level less than 35db (probably worst than 35db), why patients with dry ear and normal ear underwent operation? Finally we know that the upper limit of normal hearing in children is 20 dB, while the surgeons include 35dB as an indication for operation.

¹ Farhadi M, Ghanbari H, Izadi F, Eilkani MS, Kamrava SK. Effectiveness of adenoidectomy on tympanostomy tubes retention duration. Medical Journal of Islamic Republic of Iran, 2011. 26(4):153-157.

IV) Some ambiguities are detectable in the result section: First, the different parts of this story do not support one another. After doing lot of intellectual gymnastics, readers cannot conclude, how many ears were evaluated? In the abstract it was stated 170 ears, but in the method 118 and 102, and in result 118 and 70 ears! Second, there are overlaps in duration of time in figure 1 and 2. Third, method of study was repeated in the results section. Forth, the words "mean" and "duration" in tables 1 and 3 are vague. Fifth, because there is not any data in text regarding the mean duration of persistent TT, readers will not know how long the TT result will last on average. Nevertheless data of table 2 do not lead to this conclusion that there is significant difference between two groups clinically. I believe that one month difference in durability of TT is not very important clinically, while the author has tried to emphasize using the anterior inferior quadrant incision. Therefore, it would be better if researchers interpret the data rather than solely overstating or reporting them. Finally, readers become puzzled and unable to understand or comprehend nonstandard unusual abbreviations such as:"AIQ", or "PIQ" which was not explained in the body of the text.

V) There are some flaws in discussion and conclusion. I believe that the author should not have added new statements or suggestion in discussion or conclusion part of story, which are not related to (or not supported by) method or results section of the study. What the author has said about "better improvement and decreased episode otorrhea" were irrelevant to the aim of this study. Surprisingly, he came up with a different conclusion while saying "different tube designs should be considered" without describing it in Methods or reporting its benefit in the previous sections. At the same time some sentences do not make any sense at all. For example phrases elicited from reference 6 in discussion. Finally the author affirmed "it needs further investigations." It is my opinion that it is inappropriate journalistic superfluous comment. Of course, further research is always necessary. And the author should explain why it is a crucial issue? What are limitations and deficiencies in his report which other investigators should work on or discover?

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