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ADVANCING SURGICAL STANDARDS

Letters and comments

Endonasal dacryocystorhinostomy with and without stenting

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COMMENT ON
Mohamad SH, Khan I, Shakeel M, Nandapalan V.
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We read the above article with interest as we conducted a study[1] and a Cochrane review on the same topic. There were aspects in the paper that are unclear and leave us rather puzzled.

The authors state that all the cases were performed by the same surgeon but they did not state how the surgeon decided that stents were needed in a particular case and whether these stents were taken out or left in permanently?

Furthermore, the authors state that the group of patients without stents had a greater subjective success rate than those with stents but have given no logical explanation as to why the group of patients without stents had a significantly better outcome. This finding is in stark contrast to other studies including randomised controlled trials on the subject that reported no significant differences in outcomes between the two groups or even a slightly better outcome in the patients with stents.[2,3] We wonder whether the stents inserted were removed prematurely, which would account for a higher rate of rhinostomy closure.

The authors also state that the postsaccal blockage was assessed by sac washout, probing and dacrocystography. While dacrocystography reliably shows morphologic characteristics of the nasolacrimal system, revealing congenital or acquired stenosis, in our experience, it gives no additional information in management of patients undergoing dacryocystorhinostomy. Moreover, delivery of ionising radiation occurs with this technique; the absorbed dose to the lens has been calculated as 0.04–0.2mSv for dacryocystography.[4]

Statistically, the study is underpowered (n=128). The overall success rate was 82% objectively. On that basis, at the p=0.05 level, taking 5% as an effective clinical difference (using a beta of 50%), a sample size of 160 would be needed to show a clinically worthwhile difference between two treatments.[5] We therefore believe the conclusion the authors draw from their study is based on unreliable data.

References

1. Syed MI, Head EJ, Madurska M *et al.* Endoscopic primary dacrocystorhinostomy: are silicone tubes needed? *Clin Otolaryngol* 2013 Jul 17. [Epub ahead of print.]
2. Chong KK, Lai FH, Ho M *et al.* Randomized trial on silicone intubation in endoscopic mechanical dacryocystorhinostomy (SEND) for primary nasolacrimal duct obstruction. *Ophthalmology* 2013 May 11. [Epub ahead of print.]
3. Al-Qahtani AS. Primary endoscopic dacryocystorhinostomy with or without silicone tubing: a prospective randomized study. *Am J Rhinol Allergy* 2012; **26**: 332–334.
4. Manfrè L, de Maria M, Todaro E *et al.* MR dacryocystography: comparison with dacryocystography and CT dacryocystography. *Am J Neuroradiol* 2000; **21**: 1,145–1,150.
5. Researcher's Toolkit. DSS Research. https://www.dssresearch.com/KnowledgeCenter/toolkitcalculators/samplesizecalculators (cited August 2013).

AUTHORS' RESPONSE

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We read the response by Syed *et al* to our study with interest and are surprised by the conclusions they have drawn from our paper.

It was stated clearly in our article that between 2002 and 2005 the senior author performed dacryocystorhinostomy (DCR) with a stent. As his success rate was lower than comparable evidence, he decided to change his practice in the hope of improving his results and performed DCR without a stent between 2005 and 2006.

Syed *et al*'s queries regarding stents (including removal time) have already been addressed in the methods section of our paper. In the stented group, the stents were removed at three months following surgery. We believe and understand that this is not premature as stent removal can vary from 4 to 24 weeks postoperatively.[1,2]

As for Syed *et al*'s comment on higher subjective success in the non-stented group, it was stated clearly in our publication that the use of stents was associated with eye irritation, displacement of the tube at the medial canthus, nasal crusting and granulation formation at the rhinostomy orifice, which can affect the outcome. This has been supported by the literature in that a stent can be the reason