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Letter to the editor: Effect of changing postoperative pain management on bleeding rates in tonsillectomy patients☆

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I read with great interest the excellent article titled “Effect of changing postoperative pain management on bleeding rates in tonsillectomy patients” by Fonseca et al. [1]. The authors retrospectively review to compare the rates of post-tonsillectomy hemorrhage (PTH) between narcotic versus nonsteroidal anti-inflammatory drug (NSAID) postoperative pain management. The authors concluded that secondary hemorrhage remains a significant cause of morbidity in post-tonsillectomy patients, often requiring surgical intervention. This review found no increased bleeding risk associated with use of ibuprofen and acetaminophen as opposed to narcotic pain relief. This is excellent study, however, I believed that some important factors should be considered for the comparison of PTH among the different treatments.

The authors didn't explain whether tonsillectomy was performed by the same equipment and surgeon. Many reported suggested that surgical instruments may affect the rates of PTH. Some studies found that coblation tonsillectomy increased the rate of secondary hemorrhage compared to cold or electrocautery dissection, while suture hemostasis reduced the PTH [2–4]. In addition, surgical indication was also a confounding factor. Chronic tonsillitis increased the risk of PTH compared to hypertrophic tonsils with obstructive sleep apnea hypopnea syndrome (OSA) [5]. This could be because recurrent tonsillitis results in scarring of the tonsils and adjacent tissues, fibrosis of the peritonsillar space, obscured anatomical landmarks due to recurrent inflammation of the tonsils, vascular proliferation, and increased vascular diameter compared with cases with OSA. Certainly, the PTH was closely related to the surgeons experience. The key in tonsillectomy is to accurately identify the upper pole of the tonsil and the peritonsillar space. Surgical instruments should adjoin the capsula tonsillaris but don't injury pharyngeal constrictors. Our experience and most of scholars found that almost all the PTH occurred in the inferior pole of the tonsil [6,7]. The most important considerations to prevent PTH are accurate identification of the inferior pole and controlling the extent of dissection. PTH can easily occur if the tissue of the inferior pole close to the tongue is over-excised. The inferior pole of the tonsil resembles an hourglass by assembling of pharyngeal and lingual extensions of lymphoid tissue. The extent of dissection of the inferior pole should not proceed beyond the level.

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Conflict of interest

No.

References

[1] Fonseca ACG, Engelhardt MI, Huang ZJ, Jiang ZY, Yuksel S, Roy S. Effect of changing postoperative pain management on bleeding rates in tonsillectomy patients. Am J Otolaryngol 2018;39:445–7.
[2] Praveen CV, Parthiban S, Terry RM. High incidence of post-tonsillectomy secondary haemorrhage following coblation tonsillectomy. Indian J Otolaryngol Head Neck Surg 2013;65:24–8.
[3] Windfuhr J, Deck J, Remmert S. Hemorrhage following coblation tonsillectomy. Ann Otol Rhinol Laryngol 2005;114:749–56.
[4] Cassano M, Bayar Muluk N, Di Taranto F, Subramaniam S. A comparison of intraoperative haemostatic techniques during tonsillectomy: suture vs electrocautery-a study to assess postoperative pain scores and duration to resumption of normal diet. Clin Otolaryngol 2018 May 7. https://doi.org/10.1111/coa.13129. [Epub ahead of print].
[5] Spektor Z, Saint-Victor S, Kay DJ, et al. Risk factors for pediatric post-tonsillectomy hemorrhage. Int J Pediatr Otorhinolaryngol 2016;84:151–5.
[6] Burton K, Hanke S, Gungor A. Reduced post-tonsillectomy bleeding rates through a refined technique. Am J Otolaryngol 2017;38:438–41.
[7] Lou ZC, Lou ZH. Post-tonsillectomy hemorrhage: underlying factors and prevention. Am J Otolaryngol 2018;39:230–1.

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