

FP 32: One Stage Simultaneous Bilateral Endoscopic Type I Tympanoplasty with Cartilage reinforcement: Our experience in Ospital ng Makati

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Background: As endoscopic tympanoplasty starts to gain popularity because it provides better surgical view, shorter operative time, and aesthetically favorable. Today, there are reported cases of simultaneous bilateral endoscopic ear surgery are done worldwide which showed high success rates and are more cost-efficient. In line of this, this paper aims to report the experience of a same-day bilateral endoscopic tympanoplasty and report the outcome of surgery. Currently, no existing local published journal or report using this technique.

Clinical Case: A 48-year-old female diagnosed as a case of Chronic Otitis Media with subtotal perforation of the tympanic membrane. Baseline pure tone audiometry showed mild conductive hearing loss on the right and moderate conductive hearing loss on the left with an average of 56.6db and 63.33db, respectively. Patient Underwent simultaneous bilateral endoscopic Type I tympanoplasty with cartilage reinforcement under general anesthesia. Post-operatively, 100% graft intake and improvement in pure tone audiometry average were observed

Conclusion: This technique is better than traditional two stage endoscopic tympanoplasty in terms of operative time and exposure to anesthetic agent. The outcome of the graft intake and audiologic result is comparable.

Reference:

1. "Tympanoplasty and Ossiculoplasty." *Surgery of the Ear*, by M. Glasscock and Aina Gulya, B.C. Decker, 2003, pp. 463–485.
2. Sarkar, Saurav. "A Review on the History of Tympanoplasty." *Indian Journal of Otolaryngology and Head & Neck Surgery*, vol. 65, no. S3, 2012, pp. 455–460., doi:10.1007/s12070-012-0534-5.
3. "Tympanoplasty and Ossiculoplasty." *Cummings Otolaryngology: Head and Neck Surgery*, by Paul W. Flint and Charles W. Cummings, Elsevier, Saunders, 2015, pp. 2177–2187.
4. Choi, Nayeon, et al. "Comparison of Endoscopic Tympanoplasty to Microscopic Tympanoplasty." *Clinical and Experimental Otorhinolaryngology*, vol. 10, no. 1, 2017, pp. 44–49., doi:10.21053/ceo.2016.00080.
5. Tseng, Chih-Chieh, et al. "Comparison of the Efficacy of Endoscopic Tympanoplasty and Microscopic Tympanoplasty: A Systematic Review and Meta-Analysis." *The Laryngoscope*, vol. 127, no. 8, 2016, pp. 1890–1896., doi:10.1002/lary.26379.
6. Lade, Himani, et al. "Endoscopic vs Microscopic Myringoplasty: a Different Perspective." *European Archives of Oto-Rhino-Laryngology*, vol. 271, no. 7, 2013, pp. 1897–1902., doi:10.1007/s00405-013-2673-z.
7. Garcia, Leandro De Borborema, et al. "Transcanal Endoscopic Myringoplasty: a Case Series in a University Center." *Brazilian Journal of Otorhinolaryngology*, vol. 82, no. 3, 2016, pp. 321–325., doi:10.1016/j.bjorl.2015.05.012.
8. Lyons, Sarah A., et al. "Fascia Compared to One-Piece Composite Cartilage-Perichondrium Grafting for Tympanoplasty." *The Laryngoscope*, vol. 126, no. 7, 2015, pp. 1662–1670., doi:10.1002/lary.25772.
9. Yang, Tao, et al. "Comparison of Cartilage Graft and Fascia in Type 1 Tympanoplasty: Systematic Review and Meta-Analysis." *Acta Oto-Laryngologica*, vol. 136, no. 11, 2016, pp. 1085–1090., doi:10.1080/00016489.2016.1195013.
10. Jalali, Mir Mohammad, et al. "Comparison of Cartilage with Temporalis Fascia Tympanoplasty: A Meta-Analysis of Comparative Studies." *The Laryngoscope*, vol. 127, no. 9, 2016, pp. 2139–2148., doi:10.1002/lary.26451.
11. Kulkarni, Shreya, et al. "Cartilage Support for Fascia Graft in Type I Tympanoplasty." *Indian Journal of Otolaryngology and Head & Neck Surgery*, vol. 66, no. 3, 2014, pp. 291–296., doi:10.1007/s12070-014-0705-7.
12. Ocak, Emre, et al. "Cartilage Reinforcement Graft versus Fascia Graft in Tympanoplasty*." *Turkish Journal Of Medical Sciences*, vol. 47, 2017, pp. 1124–1127., doi:10.3906/sag-1602-151.

13. Tek, Arman, et al. "Audiological and Graft Take Results of Cartilage Reinforcement Tympanoplasty (a New Technique) versus Fascia." *European Archives of Oto-Rhino-Laryngology*, vol. 269, no. 4, 2011, pp. 1117–1126., doi:10.1007/s00405-011-1779-4.
14. Sharma, Rajnishchander, and Munish Saroch. "Our Experience with Single Sitting Bilateral Myringoplasty." *Indian Journal of Otology*, vol. 19, no. 2, 2013, p. 59., doi:10.4103/0971-7749.113508.
15. Daneshi, Ahmad, et al. "Bilateral Same-Day Endoscopic Transcanal Cartilage Tympanoplasty: Initial Results." *Brazilian Journal of Otorhinolaryngology*, vol. 83, no. 4, 2017, pp. 411–415., doi:10.1016/j.bjorl.2016.04.014.