Endoscopic Cartilage "Butterfly" Myringoplasty in the Pediatric Population

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Objective

The present study evaluated the results of the graft success rate and hearing gain of children who underwent Endoscopic Inlay Butterfly Myringoplasty due to chronic otitis media in our institution.

Methods

The study included 42 pediatric patients aged between 8.8 and 17.3 years, who had endoscopic inlay butterfly myringoplasty with the diagnosis of chronic otitis media between September 2015 and June 2017 in the department of Pediatric Otolaryngology, Schneider Children’s Medical Center of Israel. All patients’ demographics, perforation size, and hearing status were examined.

Results

Tympanic membrane perforation was small (<) in 12 patients and medium size in 30 patients. The air-bone gap (ABG) of the patients was 18.5 ± 6.29 dB preoperatively, 8.81 ± 3.53 dB postoperatively second month, 8.09 ± 3.55 dB postoperatively sixth month. One of the patients had postoperative myringitis. Three patients had recurrent perforation in the postoperative follow-ups. Mean operative time was 45 minutes (40-68) and all patients were discharged on the same day.

Conclusion

In children, endoscopic inlay butterfly tympanoplasty is a surgical technique with short surgical duration, high graft success rate, effective hearing improvement, and high levels of postoperative patient comfort.