

# Comparative Study Of Cartilage Tympanoplasty And Temporalis Fascia Tympanoplasty In Young Patients

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## Abstract

### Background

Hearing is one of the most vital senses, and its restoration remains a primary concern for ENT surgeons. This comparative study aims to evaluate and enhance our understanding of different graft materials used in Type I tympanoplasty, focusing on graft uptake and audiological outcomes in young patients.

### Materials and Methods

This study was conducted at the Department of Otorhinolaryngology, GMERS Medical College, Gandhinagar, Gujarat. A total of 30 patients, aged between 14 to 18 years, who underwent Type I tympanoplasty, were enrolled and divided into two groups:

- Group A (n = 10): Underwent cartilage tympanoplasty (tragal cartilage).
- Group B (n = 20): Underwent temporalis fascia tympanoplasty.

### Results

- The graft uptake rate in the cartilage group was 90%.
- The graft uptake rate in the temporalis fascia group was 85%.
- Audiological improvement was found to be better in the temporalis fascia group.

### Conclusion

Cartilage tympanoplasty demonstrated a higher graft uptake rate, whereas temporalis fascia grafts yielded better audiological outcomes. Although both parameters are important, the durability of the graft material plays a more critical role. Therefore, cartilage is preferable in cases with a high risk of graft failure specially in young patients.

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