ABSTRACT

AIM:

1) The aim of the study is to compare the efficacy of endoscopic cartilage shield tympanoplasty versus endoscopic temporalis fascia.

2) To compare the audiological improvement and anatomical perforation closure after cartilage and temporalis fascia graft tympanoplasty.

METHODS AND MATERIALS:

A sample of 40 Patients with a clinical diagnosis of chronic suppurative otitis media tubotympanic disease, were enrolled in the study. Each patient preoperatively underwent otoscopic examination of ear and pure tone audiometry, after procuring the consent from them. And they randomly divided into two group viz. cartilage and temporalis fascia group. We did tympanoplasty with cartilage or temporalis fascia graft. Post operatively all the operated patients were asked to come for review at a date 3 month following surgery. Each patient postoperatively underwent otoscopic examination of ear and pure tone audiometry and impedance at 3 rd month. The methodology used for each patient was similar to that used preoperatively.

INCLUSION CRITERIA:

- Age group 20-60 years, with diagnosis of chronic suppurative otitis media, tubotympanic disease with large size perforation
- Non discharging ear for at least 6 weeks
- conductive hearing loss, mild and moderate
- good cochlear reserve
- intact ossicular chain
- pneumatised mastoid in x ray

EXCLUSION CRITERIA
- Patients not willing for surgery
- Age <20 and >60 years of age
- Cholesteatoma of ear
- Previous history of ear surgery
- pregnancy
- Systemic diseases like diabetes, hypertension, immunocompromised and cancer patients

RESULTS:

In our study of 40 patients Graft uptake of temporalis fascia group is 90% and cartilage group graft up taken is 100%. Failure rate low in cartilage group than temporalis fascia group. The audiological gain between two group show statically significance (p value= 0.769) so it is statistically proved that there is no significant difference in the gain in AirBone gap attained by using either temporalis fascia or cartilage graft material in tympanoplasty. Impedence audiometry shows B curve in all cartilage tympanoplasty patients.
CONCLUSION

Cartilage is a reliable and durable graft for reconstruction of tympanic membrane and capable of withstanding adverse conditions for longer period of time. The cartilage tympanoplasty gives better anatomic and functional results.

KEY WORDS: cartilage tympanoplasty, temporalis fascia, tympanoplasty, pure tone audiometry, impedance