patient with nose, pns and throat problems are eliminated, bilateral ear discharge, revision myringoplasty, patient<12 years>56 years

Observations: our study includes follow up of post operative cases for 2yrs. Out of 60 cases operated 11 cases did not come for follow up.Hence they were excluded. The remaining 49 cases came for follow up were included in the study.

Age distribution: The youngest patient in our study was 13 years old while the oldest patient was 56 year old. The average incidence was 26.6 years.

Table 1: Age distribution

Years	*Total Number*	*Percentage %*
13 - 20	20	40.9
21 - 30	19	38.9
31 - 40	5	10.1
>40	5	10.1
TOTAL	49	100

Sex distribution: The overall male to female ratio was 27.22. Among patients undergoing surgery 55 % were males, 45% were females.

Table 2: Sex distribution

Sex	*Total Number*	*Percentage%*
Males	25	55
Females	22	45
Total	49	100

Site of tympanic membrane perforation: Of the patients undergoing surgery 38.7 % had anterior quadrant perforation while 8.3% had posterior quadrant perforation,53% had both quadrant perforations.

Table 3: Site of Tympanic Membrane Perforation

Quadrant	*Total Number*	*Percentage%*
Anterior	19	38.7
Posterior	4	8.3
Both	26	53
Total	49	100

Pre operative air-bone gap: patients who underwent surgery 30.6% had 25 db while 40.8% had 30 dbgap and 28.6% had more than 30 db air bone gap.

Table 4: Pre Operatve Air Bone Gap

Pure Tone Average (DB)	*Total Number*	*Percentage%*
20-25	15	30.6
26-30	20	40.8
>30	14	28.6
Total	49	100

Post operative air bone gap: patients underwent surgery 90% had a gap of 20db while 10% had agap of >20db.

Table 5: Post Operative Air Bone Gap

Air Bone Gap Closure	*Total Number*	*Percentage*
<10	36	73
10-20	8	16.3
>20	5	10.7
TOTAL	49	100

Post operative graft status: The graft uptake rate was 83.6%. pinhole size perforation located anteriorly was seen in 11 cases, 4 perforations healed after 2 weeks with chemical cautery. Persistent perforation is seen in 7 cases.

Table 6: Post Operative Graft Status

Graft Status	*Total Number*	*Percentage*
Intact	42	83.6
Persistent Perforation	7	16.4
Total	49	100

Post operative subjective hearing assessment: 65% patients who underwent surgery had significant improvement in hearing while 20% patients had mild hearing improvement,15% patients had no hearing improvement.

Table 7: Post Operative Subjective Hearing Assessment

Hearing Assessment	*Total Number*	*Percentage*
Significant Improvement	32	65
Mild Improvement	10	20
No Change	7	15
Worsened	0	0
Total	49	100

4. Discussion

Age incidence: The youngest patient inour study was 13 years old while the oldest patient was 56 years old.The average age incidence was26.6 years. A study conducted by Jyothidhabolkar also corresponded with the same age group.In the study conducted by Anand et al the average age was 26 years.

Sex incidence: The overall male to female ratio in our study was 55:45.In Jyothidhabolkar study the ratio was 66:34 and Anand group the ratio was 60:40.Though the overall male to female ratio was consistent with other studies.

Sie of perforation: Of the patients undergoing surgery 38.7% had anterior quadrant perforations, 8.3% patients had posterior quadrant perforations, 53% patient had both quadrant perforations.In our study both the quadrant perforations are equivalent to moderate and large perforations.

Graft uptake: The graft uptake rate 83.6% in our study. Varoius studies showed the graft uptake was in the ratio of 80-90%. Abraham eviator noted that graft uptake rate with tragal perichondrium was 90.47%,T S Anand et al observed graft takeup rate of 90% with hearing improvement 85%.The present study graft uptake rate is reasonably comparable with other authors.

Hearing results: 90% patients who underwent surgery had a air bone gap more than 20 db. Taking post operative air bone gap as the criteria, our study results shows that tragal perichondrium myringoplasty gives better results. A study was conducted by John L Dorn hoffer, the hearing results using tragal perichondrium grafts, out of 22 patients who underwent surgery, the graft was taken up in all the patients and average air bone gap was 6.8db in the post operative period.In our study post operative 73% patients had air bone gap of < 10db. The present study graft uptake rate is

reasonably comparable with other authors, tragal cartilage perichondrium graft used appears stiff and thick, but allows good sound conduction and hence gratifying post operative hearing results.

5. Conclusions

Myringoplasty is effective surgery in tubotympanic disease, for control of the disease as well as in improvement of hearing. Taking post operative puretone average as the criterion, tragal perichondrium gives better results in hearing improvement. The results of myringoplasty with tragal perichondrium is very good,when graft uptake is concerned. Tragal perichondrium appers to be a better alternative to other grafts like temporalis fascia.

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