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INTRODUCTION

Chronic suppurative otitis media (CSOM) is an inflammatory process of the mucoperiosteal lining of the middle ear space and mastoid .

The WHO definition requires only 2 weeks of otorrhoea, but otolaryngologists tend to adopt a longer duration, e.g. more than 3 months of active disease

Myringoplasty with mastoidectomy has been identified as an effective method of treatment of chronic ear infection resistant to antibiotic therapy, but the effect of mastoidectomy on patients without evidence of active infectious disease remains highly debated and unproven

There are three opinions in this issue. The first is that mastoidectomy is useful for both infected and dry ears (McGrew et al., 2004). The second is that mastoidectomy is useful for infected ears, but not for dry ears (Mutoh et al., 2007). The third is that mastoidectomy is not useful for either infected or dry ears (Mishiro et al., 2001).

Aim of study:

To compare between myringoplasty with and without cortical mastoidectomy in the treatment of non cholesteatomatous chronic otitis media. parameters to be studied are graft uptake, ear dryness and air bone gap

Classification of CSOM:

Healed COM "Tympanosclerosis".
Inactive (mucosal) COM "Perforation", The target group.
Inactive (squamous) COM "Retraction pocket".
Active (mucosal) COM.
Active (squamous) COM "Cholesteatoma".
Canter et al, 2008



MATERIAL AND METHODS

prospective randomized study was done On fifty patients with perforated drum presented to the outpatient clinic of Otorhinolaryngology department, Faculty of medicine, Cairo University.

During the period of 18 months from June, 2013 to December, 2014 we examined 50 patients aged from 12 to 60 years of age having CSOM with ear drum perforation. Patients were managed medically and after dryness of their perforations-one month at least- they were operated upon.

Patients of the study were divided randomly into two different groups, each group included 25 patients

Inclusion criteria

1. More than 12-years old.
2. Dry perforation for 1 month at least "dry and quiescent ears."
3. Central perforation.
4. Tubotympanic disease.

Exclusion criteria

1. Less than 12 years.
2. Wet ear.
3. Marginal or attic perforation.
4. Cholesteatomatous ear.
5. Associated Otitis externa (OE).
6. Previous mastoid operatio.
7. Diabetes mellitus.

MATERIAL AND METHODS

Group (1): The patients of this group were subjected to myringoplasty alone.

Group (2): The patients of this group were subjected to myringoplasty with cortical mastoidectomy. All patients were subjected to preoperative pure tone audiometry and it was repeated 3 months postoperatively .

All patients underwent surgery by postauricular approach with underlay technique. Temporalis fascia was used for grafting. patients were operated upon by the same surgeon.

Results

Average air-bone gap (A-B gap) preoperative was 20.2 ± 8.7 in group1, while it was 22.2 ± 8.04 in group 2, Average A-B gap 3 months postoperative in group 1 was 16 ± 10.5 , while it was 19.8 ± 8.2 in group 2.

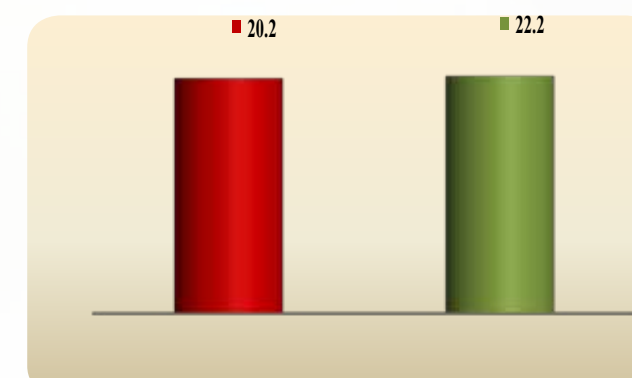
Graft success rates were 70% in group 1, 80% in group 2.

Dry ears -3 months postoperative- were 76% in group 1, 88 % in group 2.

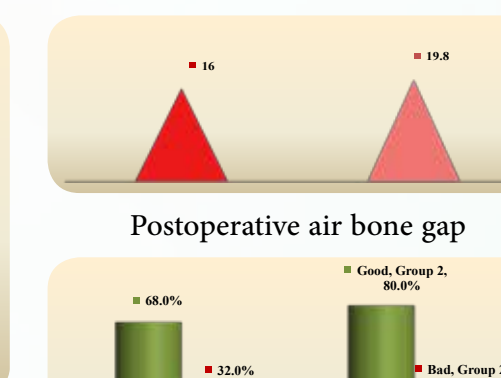
	Group 1 (n=20)		Group 2 (n=20)		P value
Sex	N	%	N	%	
Male	15	60.0	14	56.0	0.77
Female	10	40.0	11	44.0	NS
Age (years)	27.8 ± 8.2		28.04 ± 7.7		0.93
Mean \pm SD					NS

	Group 1 (n=20)		Group 2 (n=20)		P value
Graft uptake	N	%	N	%	
Successful	17	68	20	80.0	0.33
Failed	8	32	5	20.0	NS
Dryness					0.26
Dry ears	19	76	22	88	
Discharging ears	6	24	3	12	NS

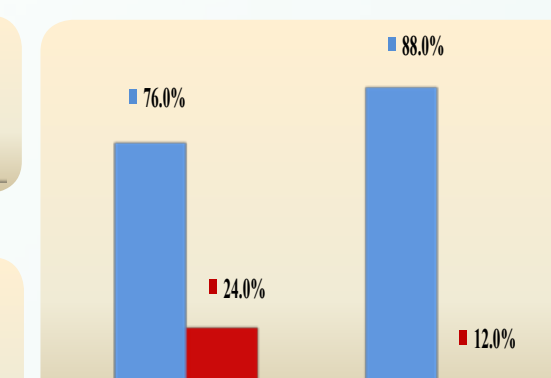
	Group 1 (n=20)	Group 2 (n=20)	P value
Preoperative A-B gap	20.2 ± 8.7	22.2 ± 8.04	0.668
Postoperative A-B gap	16 ± 10.5	19.8 ± 8.2	0.347
A-B gap difference	-2.2 ± 9.5	-1.6 ± 6.5	0.392
			NS



Preoperative air-bone gap.



Graft uptake in both groups.



Ear dryness in both groups.

CONCLUSION

Mastoidectomy gives no statistically significant benefit over simple myringoplasty in the treatment of non-cholesteatomatous CSOM as regards graft success rate and dryness of the middle ear.

Our study emphasizes the fact that overall satisfactory hearing outcome with adequate air-bone closure can be achieved irrespective of cortical mastoidectomy in the surgical treatment of tubotympanic disease.

When considering the addition of a mastoidectomy to a myringoplasty, the performing surgeon should consider not only the potential added benefit but also potential risks and costs to the patient.