Myringoplasty with and without cortical mastoidectomy in treatment of non-cholesteatomatous chronic otitis media “a comparative study”.

Tareq M. Algarf, Hazem Mohammed Abdel Tawab, Fadi Mahmoud Gharib, and Louay S. ElSharkawy
Department of Otorhinolaryngology, Faculty of Medicine, Cairo University, Cairo, Egypt.

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).

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

A 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.

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 group 1, 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.

CONCLUSION

Mastoidectomy gives no statistically significant benefit over simple myringoplasty in the treatment of non-cholesteatomatos 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.

For additional information please contact: [Tareq M. Algarf] [Otorhinolaryngology Head & Neck surgery] [Cairo University – Faculty of Medicine] [Tareqgarf@hotmail.com]