Surgical Audit in Day Care Myringoplasty

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Summary
Day-case surgery is preferred for adults, allowing post-operative fast recovery in family environment and support. Myringoplasty using the traditional method of underlay temporalis fascia or tragal perichondrium is usually performed as an in-patient. From 2003 to 2004, 22 myringoplasty procedures were performed in a dedicated day surgery unit at the Hospital Melaka. We report the retrospectively review of the outcome results of these procedures. None of the patients need admission overnight. There were no surgical or anesthetic complications noted and this series suggests that day-case surgery is a safe and desirable practice for patients undergoing myringoplasty. However, there should be the facility for admission if required.

Key Words: Myringoplasty, Day care, Surgical audit

Introduction
Myringoplasty using an end aural or post aural approach and temporalis fascia underlay technique is usually associated with an overnight stay rather than day care surgery. This practice is due to the fact to prevent exuberant activity post-operatively, observation for bleeding and recovery from anesthesia. The majority of procedures performed as day cases in ENT department include grommet insertion, manipulation of fracture nose under general anesthesia, adenoidectomy, and tonsillectomy and septoplasty. Day care surgery has obvious advantages to both patient and health care providers. Patient prefers this option as it causes minimal disruption to their working and domestic life. This paper presents our experience of day care myringoplasty over two years period (January 2003- December 2004) in Day care surgical unit situated at the entrance of our hospital.

Materials and Methods
A retrospective analysis of the case notes of all patients who had undergone myringoplasty as a day care during a two year period from January 2003 to December 2004 in Otorhinolaryngology department of Hospital Melaka was carried out. Day care unit is fully equipped theatre and dedicated day case ward with appropriate staffing arrangement. All patients are assessed preoperatively for their suitability for day case surgery by anesthetist. The following data were collected: age, side and size of perforation, grade of surgeon, surgical approach, graft material, postoperative dressings, need for overnight admission, complication, and outcome.

Results
The total number of patients who underwent myringoplasty as a day cases were 22. The age of patients ranged from 15 to 53 (mean =37.54). The youngest patient was 15 years. The grades of surgeon performing the procedure were shown in Table I. The sizes of perforation were assessed from postoperative notes diagram drawn by the surgeon and was shown in Table II. All patients had their procedure performed under general anesthesia. All patients underwent permeatal approach. The graft used during the procedure was tragal perichondrium in 19 cases and...
temporalis fascia in three cases. Postoperatively a light dressing with Bismuth Idoform paraffin paste soaked ribbon gauze were used in 13 cases and silk and cotton were used in remaining cases. None of our patients stayed overnight and none of our patients had any anesthetic complication or surgical complication. Out of 22 cases, closure of perforation was achieved in 12 cases and sizes of perforation were reduced in remaining ten patients.

Table I: Grade of the primary surgeon performing the procedure (N=22)

<table>
<thead>
<tr>
<th>Grade of primary surgeon</th>
<th>Number of procedures performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior specialist</td>
<td>19</td>
</tr>
<tr>
<td>Junior specialist</td>
<td>2</td>
</tr>
<tr>
<td>Medical officer</td>
<td>1</td>
</tr>
</tbody>
</table>

Table II: Size of Perforation (N=22)

<table>
<thead>
<tr>
<th>Size of Perforation</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>0</td>
</tr>
<tr>
<td>Medium</td>
<td>15</td>
</tr>
<tr>
<td>Large</td>
<td>7</td>
</tr>
</tbody>
</table>

Discussion

A number of Ear Nose Throat procedures are currently being carried out as day case procedures. There is a growing trend towards day case surgery. Myringoplasty is one of the ENT procedures that can be performed as a day case procedure. Usually these cases are being performed as in patient basis. The main reason is use of pressure bandage that is removed the day after the surgery. It is mainly performed to prevent heamatoma. Other reasons are the belief that mobilization too early may be detrimental to the outcome of surgery. In this study, light dressings were used using either Bismuth Idoform Paraffin Paste or silk with cotton. The rate of postoperative heamatoma was nil in our series compared with other series quoted as 1.4%. The overnight stay were none in our series compared with other series which was about 2.4%. The post operative pain is usually mild and can be controlled by analgesics.

The recovery from general anaesthesia has dramatically improved in recent years due to advancement in anesthetic techniques, instrumentations and drugs. Because of these recovery is smooth and fast with few postoperative problems like nausea and vomiting. Although the success rate for myringoplasty is about 55% when compared with other series of 83.3%. This may be due to the fact that the selection criteria for myringoplasty is not standardized, with almost one third of perforations being of large size and being performed by different surgeons. Definitely the overall cost of day surgery is much less compared with in-patient and more over the bed availability for other more serious cases is assured.

Conclusion

Myringoplasty can be performed as a day care basis with out much complication. The success rate can be improved by standardizing the method. Patient care and safety are predictable.

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