

Short Communication

A simple method for retaining the aural speculum

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Abstract

In middle ear surgery via the permeal approach, aural specula are frequently used to improve visualization of the operative field. Mechanical holders designed for retaining the aural speculum, are expensive and require sterilization for reuse. A simple technique for retaining the speculum which overcomes the drawbacks of a mechanical holder is described.

Key words: Tympanoplasty, instrumentation, surgery

Introduction

The permeal approach is one of the approaches utilized in middle ear surgery, which often requires the use of an aural speculum for ease of access (Ballantyne, 1976). Specula come in different sizes, finishes and designs to provide the optimum operating conditions for the surgeon. To free the surgeon's hand, a self-retaining speculum e.g. a Holmgren or a speculum-holding assembly such as the Shea, Ratnesar or Yarsargil (Downs Surgical, 1993) is used to stabilize the speculum intra-operatively.

A simple method for retaining the speculum which does not limit the freedom of movement of the surgeon's hands is described.

Method

The patient is towelled and the external auditory meatus prepared in the surgeon's preferred way.

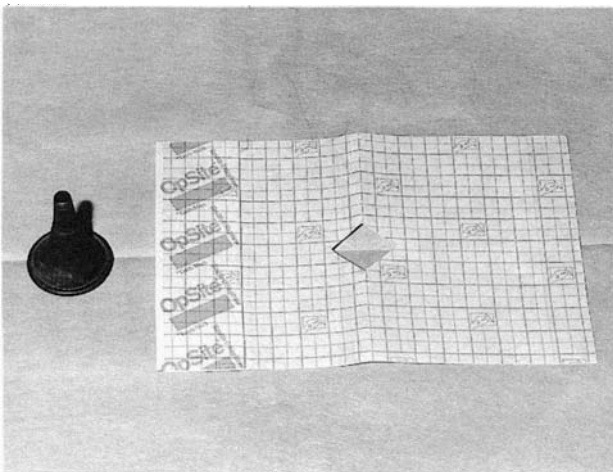


FIG. 1

The transparent adhesive Opsite Flexigrid dressing (10 × 12 cm) with a diamond-shaped area cut through all the layers of the dressing ready for fixing over the speculum.

Then an aural speculum which best fits the ear canal and allows the optimum view is selected. A single-sided transparent adhesive dressing, OpSite (Smith and Nephew Medical Ltd) with a Flexigrid backing (10 × 12 cm) is used (Figure 1).

The adhesive backing is removed after cutting a diamond-shaped opening smaller than the lumen of the speculum in the centre through all layers of the dressing. The dressing is fixed over the speculum.

The operator places the speculum into the ear canal and only when the desired view is attained is the dressing stuck down onto the surrounding head towels.

The Flexigrid backing which provides support for the dressing is removed. The remnants of the dressing within the lumen of the speculum are stuck down onto the inside of the speculum rendering them unobtrusive (Figure 2).

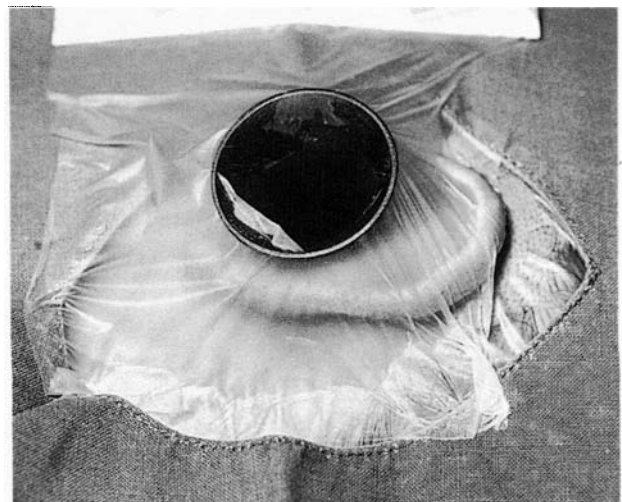


FIG. 2

The dressing and aural speculum assembly in place with the free luminal edge of the transparent dressing stuck down onto the inside of the speculum.

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TABLE I
COST COMPARISON (EQUIPMENT COST FROM DOWNS PRICE LIST 1993/94)*

Conventional assembly		Economical method	
Item	Unit price (£)	Item	Unit price (£)
Yarsargil flexible arm	495.75	OpSite (Smith and Nephew Ltd)	0.90p
Aural speculum holder	80.00		
Sterilization	2.00		
Total	577.75		0.90p

*Prices are VAT exclusive. The sterilization and repackaging costs are for each time the equipment is used.

Discussion

It is recommended that local anaesthetic injection and graft harvesting are carried out prior to applying the dressing, because it is meddlesome to undo and re-apply peroperatively. The surgeon should choose the desired speculum and try it *in situ* without the dressing to ascertain the optimum size and position. Thus when the speculum-dressing assembly is put in place, the desired position is quickly and easily attained.

The dressing should not be stuck down so tightly that it precludes limited movement of the speculum in case there needs to be some small adjustment in the operative view as surgery proceeds. Slight tilting of the leading end of the speculum can be achieved by gentle pressure on the proximal rim.

Conclusions

This method has been used successfully by the authors for tympanoplasties and stapedectomies. It is economical, reducing the sterilization and repackaging costs of a conventional speculum holder assembly (Table I).

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