

## Stapled double head and neck drape for otological procedures

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### Abstract

**Introduction:** During otologic surgical procedures, there is often a dilemma when ensuring that hair is kept out of the surgical field. For a surgeon, the simplest and commonest technique is to liberally shave the head, but this can cause aesthetic concerns for the patient. Failure to keep the area hair-free can lead to a range of adverse surgical outcomes including wound infection and poor scar cosmesis. We describe a technique used in our department to effectively control hair during otologic surgical procedures, with no post-operative aesthetic concerns.

**Methods:** The use of re-usable or disposable surgical drapes with disposable skin staples can effectively exclude hair from the operative field throughout the procedure, without fear of the drapes slipping or losing adhesiveness.

**Results:** The authors have obtained good results both during and after surgery, using this quick and easily learnt method, with no cases of long-term skin damage or scarring.

**Discussion:** We find this to be an effective method of hair and skin preparation for otologic surgical procedures, and suggest it to fellow otorhinolaryngologists as a helpful alternative technique.

**Key words:** Otologic Surgical Procedures; Surgical Drapes; Surgical Stapling

### Introduction

Good basic surgical technique, delicate tissue handling and a clean surgical field are vital for optimal wound healing. During otologic surgical procedures, patients' hair can pose a particular problem. Most patients prefer not to have their head shaved as this results in an asymmetrical appearance. However, intrusion of hair into the surgical field is aesthetically unsatisfactory and reflects poor technique. Adverse outcomes may arise, including wound infection, wound dehiscence and poor scar cosmesis.<sup>1,2</sup>

Most otologists have their own preferences for skin and hair preparation, and their own draping techniques, each with its own merits.<sup>3,4</sup> Most would trim or shave a variable amount of hair around the ipsilateral ear, especially for cochlear implantation and pinnaplasty cases, but some also do so for other otologic cases such as mastoidectomy, ossiculoplasty and tympanoplasty. Below, we describe a method that we have found effective.

### Method

Aqueous gel and a hand scrubbing brush are used to brush the hair away from the operated ear. Neither hair trimming nor shaving is required. The area is cleaned with the preferred skin preparation solution, and a double head and neck drape is placed beneath the patient's head. The ipsilateral side of the superficial drape is positioned posterior to the ear running inferiorly to superiorly. The contralateral side of the superficial drape is positioned superior to the ear running

anteriorly to posteriorly. The drapes are then stapled in place using a Promed disposable skin stapler (Promed, Killorglin, Ireland) (Figure 1). This method effectively excludes hair from the operative field throughout the procedure, without the risk of the drapes slipping or losing adhesiveness. The latter may be particularly problematic during mastoidectomy or cochlear implant cases, when wound irrigation is required while drilling the temporal bone.

When our technique is used, a 'hairless' operative field can be seen at the end of the procedure (Figure 2). Staples are positioned at the hairline margin: none are placed onto the face. At the end of the operation, the staples are removed with an artery forceps or staple remover, taking



FIG. 1  
A Promed disposable skin stapler.



FIG. 2

Surgical photograph showing a 'hairless' operative field at the end of the procedure, following use of the stapled double head and neck drape method.

care to ensure the skin is not traumatised. The drapes are removed and the hair returned to its pre-operative state.

### Discussion

We have found the above method to have several advantages: (1) improved patient satisfaction (hair trimming and shaving are avoided); (2) speed (hair and skin preparation takes no longer than 1 minute); (3) accessible equipment (available in most operating theatres); (4) good control of hair throughout the procedure; and (5) the method is easily learnt by

junior surgical staff (the assistant can prepare the patient while the primary surgeon scrubs, saving valuable operating theatre time).

The lead author has used this technique in excess of 200 cases, with no cases of long-term skin damage or scarring.

We find this to be an effective method of hair and skin preparation for otologic surgical procedures, and suggest it as a potentially helpful alternative technique for fellow otorhinolaryngologists.

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Mr N Amin takes responsibility for the integrity

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