*The Journal of Laryngology & Otology*
March 2001, Vol. **115,** pp. 212–213

# Short Communications

# The fish hook retractor

P. Arullendran, F.R.C.S., A. K. Robson, F.R.C.S. (Orl)

**Abstract**
We describe a simple and easily adjustable method of retracting skin flaps during head and neck surgery. It involves the use of a modified fish hook and rubber band. The retractor is easily applied and adjusted, and inexpensive to manufacture.

**Key words: Surgery; Surgical Instruments**

## Introduction

Retractors are some of the oldest surgical instruments. They have uses in all branches of surgery and have various designs. Broadly speaking, they can be blunt or sharp, hand held or self-retaining.[1]

The first step in most head and neck procedures is to elevate a skin flap. Once elevated the flap needs to be secured to prevent it obscuring the operative field. Traditionally this is either done by an assistant who employs skin hooks, or the flaps are stitched to the surgical drapes.

The use of retractors by an assistant can be physically demanding especially during a long head and neck procedure. A self-retaining retractor enables the assistant to be more directly involved in the operation. Stitching skin flaps relies on the drapes not being displaced during the operation, in order to maintain the appropriate tension on the skin flap. It can also, on occasion, unnecessarily traumatize the skin.

We have found the fish hook retractor to be an elegant and cheap alternative.

## Methods and materials

A set of size 10 wetfly hooks can be purchased at any reputable fishing tackle shop for approximately £1 per pack of five. Each hook has the barbed end removed with wire cutters, thread is tied to the hook and an elastic band is attached to the thread and the retractor is sterilized using an autoclave (Figure 1).

Once a skin flap is elevated, it is secured to the drapes with the fish hook retractor. The cut end of the hook is applied to the skin edge, and the elastic band is secured to the drapes with an artery forceps (Figure 2). Any subsequent changes to the flap, either in altering tension or position, are easily performed by unclipping the artery forceps and repositioning the fish hook retractor.

## Discussion

Hooks have been used throughout surgical history, to secure specific tissues or organs with minimal trauma. The hooks are either handheld or secured with clips or sutures.[1] When a hook is secured with an elastic material, it then has the ability to maintain near constant tension on a skin flap.

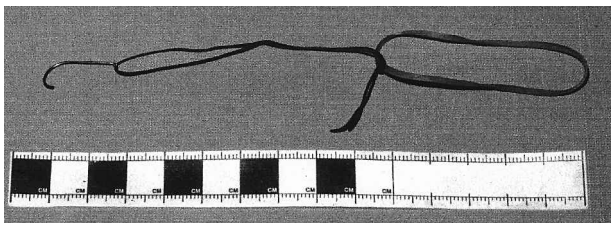

Fig. 1
Fish hook retractor constructed from modified fish hook, mersilk tie and elastic band.

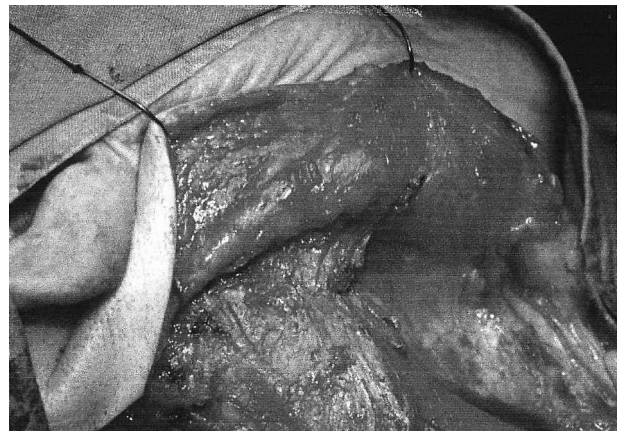

Fig. 2
Fish hook retractor used to retract the superior skin flap during a neck dissection.

From the Department of Otolaryngology/Head and Neck Surgery, Carlisle Hospitals NHS Trust, Carlisle, UK.
Accepted for publication: 22 September 2000.

The fish hook retractor is cheap to make, easy to apply, and easy to readjust.

A similar fish hook retractor has already been described in neurosurgery.[2] This employs a double prong hook, a metal spring coil, and a modified bull clamp. Its action and function is similar to our fish hook retractor and equally valuable in head and neck surgery. However, ours is simpler, cheaper and easier to manufacture and it is also useful in retracting the skin flap in open rhinoplasty.

**Acknowledgement**

The senior author (AKR) acknowledges Mr I. Stewart, Consultant senior lecturer in Otolaryngology, University of Otago, Dunedin, New Zealand, who first demonstrated the fish hook in clinical use.

**References**

1 Kirkup J. The history and evolution of surgical instruments. VII. Spring forceps (tweezers), hooks and simple retractors. *Ann R Coll Surg Engl* 1996;**78**:544–52

2 Yasargil MG, Vise WM, Bader DC. Technical adjuncts in neurosurgery. *Surg Neurol* 1997;**8**:331–6

Address for correspondence:
Mr A. K. Robson,
Consultant Otolaryngologist,
Carlisle Hospitals NHS Trust,
Carlisle, CA2 7HY, UK.

Mr P. Arullendran takes responsibility for the integrity of the content of the paper.
Competing interests: None declared