

## Short Communication

# The 'Darling' elbow rest—an aid to a stable operating position in endoscopic sinus surgery

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### Abstract

The 'Darling' elbow rest provides a compact, easily manoeuvrable platform for the surgeon's elbow during endoscopic sinus surgery, stabilizing the endoscope and increasing operative safety.

**Key words:** Nose; Endoscopy, surgery, instrumentation

### Introduction

Comfort for the surgeon and safety for the patient during endoscopic sinus surgery are both enhanced by adopting an operating position with adequate elbow support. This diminishes unwanted movement of the tip of the rigid endoscope and reduces muscle fatigue in the operator's arm and forearm. The correct position as described by Stammberger 1991 involves operating in the sitting position on the patient's right side with the patient's head inclined to the right. The endoscope is held by its shaft with the non-dominant hand (usually left). A Stammberger endoscope holder may be used to aid with grip. The overall length of the endoscope is also important in maintaining stability. Several manufacturers now produce shorter endoscopes which reduce undesired movements at the tip as there is less length to cause magnification of movement from the operator's hand.

This may also help to reduce fatigue in the surgeon's forearm and hand.

It is recommended that the left elbow be placed either on the operating table or on the endoscope table for support. Although resting the elbow on the operating table may sometimes be adequate, we found, often, that this was not ideal as the surface of the table was too low for comfort and good elbow contact for the non-dominant left elbow. Since the left arm supports the weight of the endoscope throughout each operation, adequate left elbow support seems essential. The use of a Mayo stand for support of the right elbow has been described (Stammberger, 1991), but we found this to be a cumbersome and somewhat unstable support if used for the left elbow.

Responding to the need described, an elbow rest designed to provide stable support where the surgeon required it was devised. The elbow support allows the left

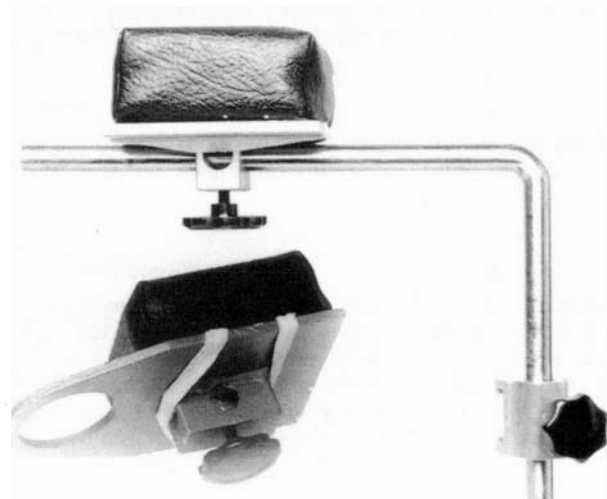


FIG. 1

Side view of the complete 'Darling' elbow rest with (inset) a close-up view of the pad, plate and clamp.



FIG. 2

The elbow rest in position and adjusted for comfort.

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forearm to form a unipod support for the endoscope; this we have called the 'unipod position'.

#### Materials and method

An elbow rest was constructed as shown in Figure 1. It consists of a right-angled metal bar that can be clamped onto the side of the operating table using a standard operating table clamp. A flat metal plate (200 × 120 × 6 mm thick) is welded to a clamp which screws on to the bar and a vinyl-wrapped sponge is attached to it by elastic on to which the elbow rests comfortably. A 6 cm diameter circle has been cut out of the plate to allow a standard Gallipot to be inserted when the device is draped, thus permitting a stable holder for the surgeon's preferred lens cleaning material.

The clamp, welded to the undersurface of the plate, allows the supporting bar to be inserted either along its length or its width, permitting the Gallipot holding circle to be positioned either next to the patient (as in Figure 2) or rotated 90° to face the head of the patient, depending on the surgeon's preference.

The elbow rest is manoeuvrable in all directions and can therefore be easily adjusted for any operator and any patient.

When the surgeon is satisfied with the position of the elbow rest (Figure 2), the patient may be draped and the

Gallipot inserted. This allows great stability of the endoscope, safety for the patient and comfort for the surgeon.

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#### Reference

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