Use of Rubens pillow in functional endoscopic sinus surgery

O Mulla, F Agada, D R Strachan

Abstract

Functional endoscopic sinus surgery is a common procedure in almost all ENT departments. Commonly, a head ring is used for head support during this procedure. We believe that the Rubens pillow enables better head stability and provides a better operating surface for surgical instruments.

Key words: Paranasal Sinuses; Endoscopy; Otorhinolaryngologic Surgical Procedures; Operating Rooms

Introduction

Functional endoscopic sinus surgery (FESS) has evolved since the early days of Messerklinger, over 40 years ago, when the concept was introduced. Stammberger and Kennedy's further refinement of the technique has enabled FESS to become a common procedure, now performed for a variety of indications.

Procedure

Functional endoscopic sinus surgery is often performed under general anaesthesia, with the patient in a supine position and their head supported on a standard head ring in the reversed Trendelenburg position. The use of this head ring is important in FESS, as it aims to support the head to give some degree of stability during the procedure. However, such head rings have their drawbacks, including inadequate head stability in some patients, inadequate support for the cervical spine curvature, and lack of an adjacent flat surface alongside the head. The last issue is of particular relevance to those endoscopic surgeons who use a demisting pad when operating. Sterilisation drapes around the head and head ring tend to 'tent up' and move when pressure is applied to them, such as when a demisting pad is used to clean the endoscope (Figure 1).

The Rubens pillow was first described by C Montague Ruben in 1959 as a 'pillow with a central hollow which is 3 inches in depth, which has a firm lateral flat surface on either side for instruments or support'. It was introduced primarily for the benefit of ophthalmologists, as it gives very good stability to the head and allows surgeons to rest their wrists, thus limiting involuntary tremor.

Conclusion

One of the authors (DS) has been using the Rubens pillow as an alternative to the standard head ring for several years, and this has now become routine practice for all FESS procedures in our unit. The advantages include excellent head stability, additional cervical spine curvature support, and

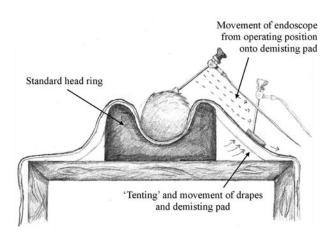


Fig. 1
Standard head ring FESS setup illustrating use of demisting pad on uneven surface.

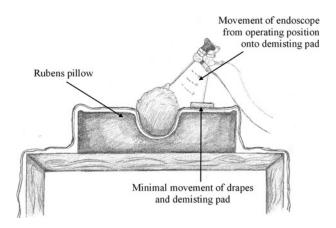


Fig. 2

Rubens head ring FESS setup illustrating use of demisting pad on firm surface.

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the provision of a firm, flat surface adjacent to the head even after sterilisation drapes have been applied. This provides a convenient location adjacent to the head for the demisting pad, which greatly reduces its tendency to move when an endoscope is being cleaned and 'de-fogged' (Figure 2).

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The Ruben pillow is available in various sizes and is still widely used by ophthalmologists².

Acknowledgement

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Address for correspondence: Mr D R Strachan, Consultant ENT Surgeon, Bradford Royal Infirmary, Bradford, BD7 9RJ, UK.

E-mail: david.strachan@bradfordhospitals.nhs.uk

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