

Short Communication

The Somjee-Crabtree temporal bone support clamp

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Abstract

A new device is introduced for holding temporal bones during dissection. It is structurally very different, more practical and effective for securing the bone than the temporal bone holding bowl which has been in use so far.

Key words: Temporal bone, surgery

Introduction

The value of temporal bone dissection in the training of middle ear surgery is undisputed. A well-equipped temporal bone laboratory is a great asset to any ENT department, and indeed a training requirement. One important item in such a laboratory is a holder for the temporal bone. Traditionally this has been a heavy-duty metallic bowl with screws that are tightened inwards to secure the bone. This is not always easy due to the irregular shape of the temporal bone, and some dissectors have filled the bowl with plaster of Paris for firm support. Despite this measure, manipulating the position of the supported bone during drilling can be inconvenient. The bowl with its disadvantages was nonetheless useful as there was little else to substitute for it. Recently it unfortunately left the market. The author felt the need to design a new temporal bone holder, addressing the shortcomings of the bowl-holder in order to improve the dissection facility and thereby benefiting both present and future otology trainees (Table I).

Description of the clamp

Figures 1 and 2 illustrate the Somjee-Crabtree temporal bone support clamp. The instrument is made of stainless steel with a non-reflective surface for use with the operating microscope. It is rust-proof and can be placed

in a tray for irrigation with water during drilling. It has a non-slip weighted base, with a main stabilising arm which can be moved vertically up and down on the retaining pillar fixed to the base. Positioning is carried out by means of friction clamp/screw locking mechanisms.

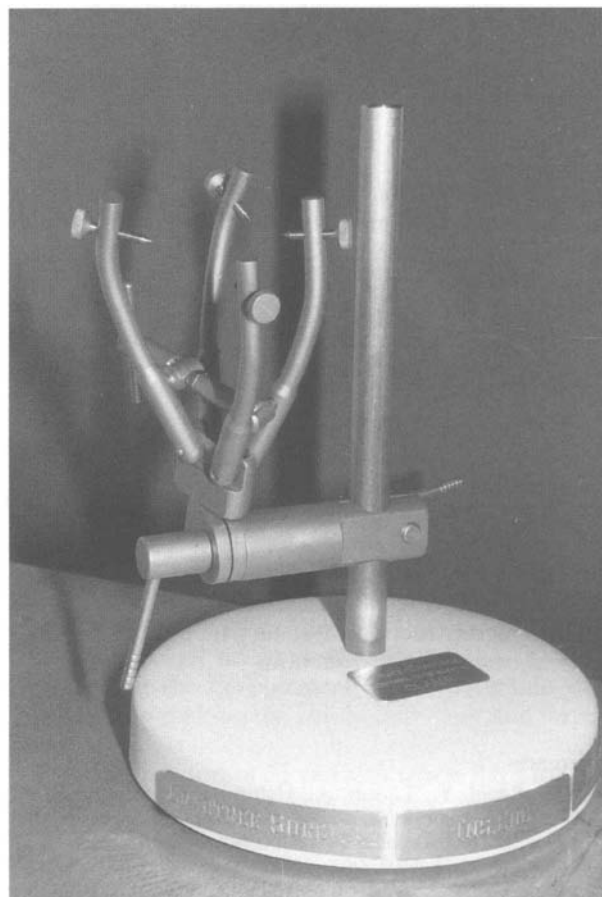


FIG. 1

The Somjee-Crabtree temporal bone support clamp.

TABLE I
SUMMARY OF ADVANTAGES

1. Rustproof.
2. Non-reflective surface.
3. Antislip mat under the base.
4. Stability of the unit.
5. The unit does not occupy unnecessary space.
6. The temporal bone is held firmly in place.
7. The position and angle of the bone can be altered or rotated without the need to disturb the bone within the clamp.
8. The unit is compatible for use in a fume cupboard.

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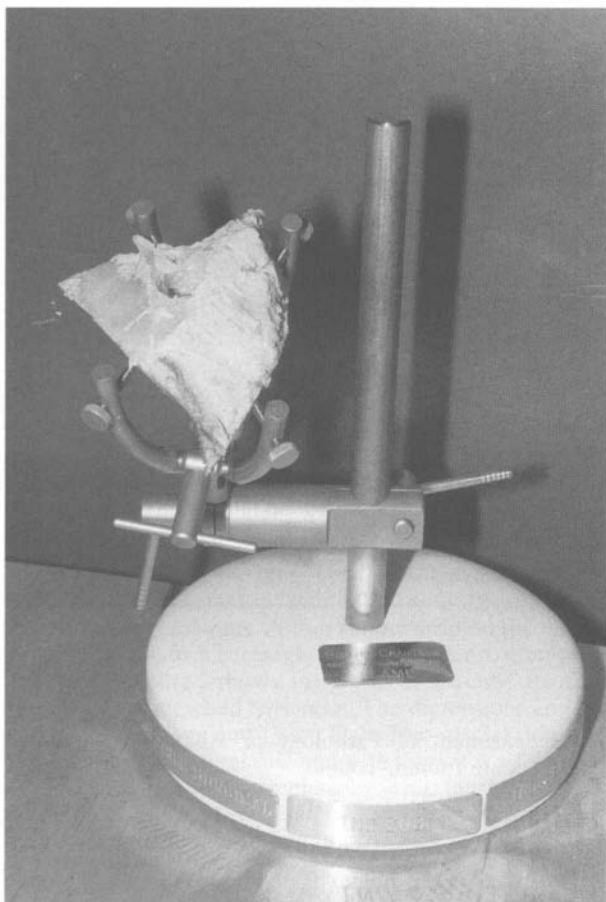


FIG. 2

The Somjee-Crabtree temporal bone support clamp with a temporal bone *in situ*.

The temporal bone is held by a clamp with four 'fingers'. The main section of the clamp can be turned through 360°

in the vertical plane, while the 'finger' portion can be moved through 360° in the horizontal plane, and clamped into position by means of the screw lock situated at the front of the stabilizing arm.

The bone-retaining 'fingers' are all mobile to facilitate bone accommodation and adjusted and immobilised via a screw 'T' bar adjuster situated at the interlink of the 'fingers'. This is used for the primary adjustment to securely grip the bone. This unit incorporates a ball-joint coupling on the two front 'fingers' enabling ease of movement with the 'T' bar coupling to the rear 'fingers'. Incorporated in the retaining 'fingers' are the locating pins that are used for the final securing of the bone in the desired position. It is thus possible to move the bone in any direction or angle for dissecting without having to disturb the secured bone within the 'fingers' of the clamp.

Conclusion

The use of this clamp is encouraged and it is hoped that this will be of service to all otolaryngologists whether trainees or trainers updating their skills. The Somjee-Crabtree temporal bone support clamp is being marketed by Aesculap Downs at a list price of £600.00 +vat.

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