

Short Communication

How I do it: an improved temporal bone holder

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Abstract

Although some form of temporal bone holder is in use in virtually all ENT postgraduate teaching departments, a paucity of information in the literature may cause problems in selecting the most appropriate model to those responsible for equipping temporal bone laboratories.

The bone holder which we describe is based on existing designs but incorporates a built-in irrigation system which offers considerable advantages to the unassisted operator.

Key words: Temporal bone; Irrigation

Description of the temporal bone holder

The holder comprises an upper bowl interconnected by a narrow pivotal system with a heavy base. It can be made of either aluminium alloy or plastic material according to preference. Stainless steel constituents have been avoided owing to their greater cost and also corrosive materials have not been used for obvious reasons.

As shown in Figures 1 and 2, the bowl which has a diameter of 12.5 cm, is perforated by four retainer prongs. The latter are sited equidistantly along the perimeter and are adjustable in a radial direction by thread screws. An

expanded plastic pad is attached to the peripheral extremity of each retainer prong to permit easy adjustment and secure fixation of the temporal bone.

The external water inlet system (Figure 1) is comprised of a flexible wire plastic tubing bent in a swan neck fashion tapering to a fine extremity. The direction and flow of the terminal water jet can be adjusted using a small tap. The inlet nozzle at the base of the bowl is easily connected to a convenient water source. A substantial drainage outlet is situated near the bottom of the bowl to permit easy water outflow.

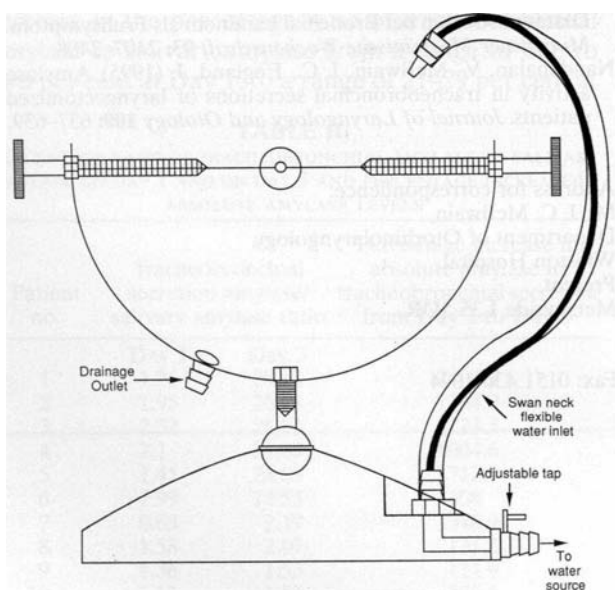


FIG. 1

Side view of temporal bone holder.

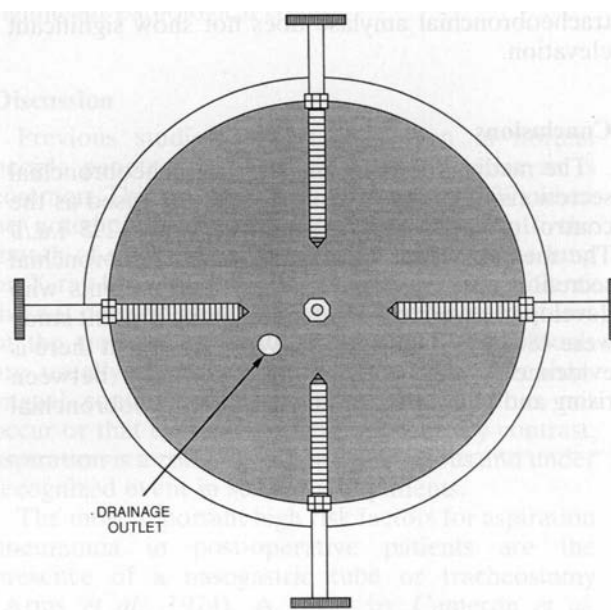


FIG. 2

Top view of temporal bone holder.

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The bowl rests on a heavy circular base with a diameter of 14.5 cm. A thin circumferential rubber strip on the under surface of the base ensures a firm grip in order to eliminate slipping. The bowl pivots on the base by means of a ball and socket joint which affords a firm grip and avoids unwanted movement. The bowl can be adjusted sideways and inclined up to an angle of 47° to the horizontal to provide adaptability to the dissector.

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