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THREE AIDS TO DENTAL PRACTICE

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Many private dental practitioners are what is termed "gadget minded". Practically all have effected at least minor improvements in standard equipment and most have adapted some toy or article of household equipment to suit "surgery outwith the surgery" or to meet some local or general difficulty. Formerly at local meetings, members of the profession used to show these adaptations to colleagues more frequently than they do at present. All of us have much to learn; all have a little to give. It is in that spirit that three aids to dental practice are described below which we employ in our practice in Malta.

PORTABLE HEADREST

When working in an operating theatre of a private hospital or nursing home, we usually operate on a surgical table which is used for general surgery but not equipped with a dental headrest. The theatre sister generally offers us a pillow which is either too soft or too hard to steady the head.

During surgery in the oral cavity we require the patient's head to be immobilised as much as possible. Far too frequently dentists have to stop work and readjust the position of the patient's head. The anaesthetist may or may not come to the dentist's aid by readjustment or by endeavouring to maintain the head at the desired angle.

A very simple headrest which is easy to assemble, light in weight, not bulky and easily portable is shown in Fig. 1. This is assembled from two india-rubber sand rings, applied one on top of the other and fixed together by adhesive tape. The advantages offered by this portable headrest are three in number. It maintains the patient's head in the required position throughout the operation, thus obviating the need for time-consuming adjustments, and for employing the constantly proffered and unsatisfactory operating pillow. Secondly, the patients never complain of after-pain in the posterior neck muscles following the use of this headrest on an operating table. Thirdly, the rings can be sterilised and covered by a sterile towel. In addition it is not bulky but light in weight, easy to assemble and to carry in an instrument bag.

It has been found effective in use and has been employed by us for the last three years. This portable headrest took its place with other operating theatre armamentaria at the Blue Sisters Hospital, Malta.

(*Note.* The rubber sand rings are manufactured by P. B. Cow (Li-Lo) Ltd., Slough, Bucks, England.)

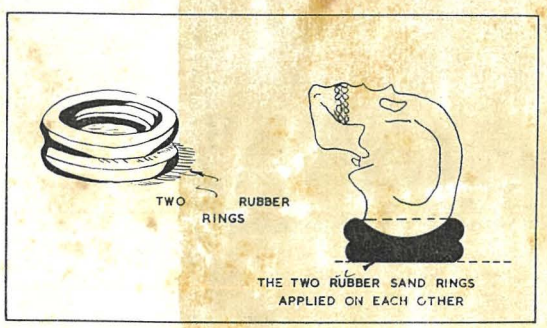

Fig. 1. The Portable Headrest for Operating Theatres as described in the text.

PORTABLE COOLANT SYSTEM FOR BONE-CUTTING BURS

The problem of heat generation, when using bone-cutting burs, is always presenting difficulties to dental surgeons when working away from their surgeries. Sometimes the cutting temperature rises to a very high point indeed. This problem is not solved by the customary "washed field technique" in which normal saline is squirted on the operating field from a water syringe by an assistant.

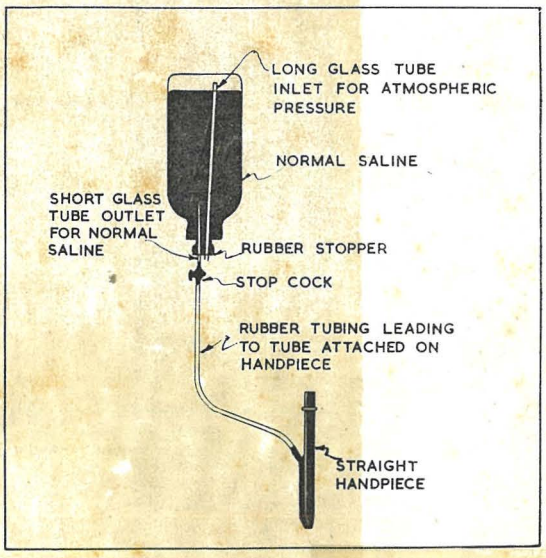

Fig. 2. The Portable Coolant System for Bone-Cutting Burs as used by the author during hospital sessions.

Sometimes normal saline arrives too early or too late. At times it arrives on the operating field with too great force, or does not impinge on the revolving bone-cutting bur directly.

A cooling device which I have been using with success for the last four years is shown in Fig. 2.

A standard blood transfusion bottle is filled with normal saline and is tightly closed with a rubber stopper, through which two 3 mm. glass tubes are passed. These tubes are 3 in. and 9 in. in length respectively. The 9 in. tube serves as an inlet for atmospheric pressure and the 3 in. glass tube serves as an outlet for normal saline. A stopcock is attached to the 3 in. tube at one end by rubber tubing whilst, at the other end, the stopcock is attached to a length of $4\frac{1}{2}$ ft. of rubber tubing, leading to the fixed water-spray tube of the handpiece. The stopcock used in this cooling device is similar to those used in enema sets.

The stopcock is turned off before tilting the bottle and the blood transfusion bottle is placed on the stand. Two or three taps are given gently to the bottle to clear the 9-in. glass tube of any trapped water during the tilting procedure. When bottle and stand are ready, the stopcock is opened fully to test flow of normal saline before the rubber tubing is fixed to the water-spray tube of the handpiece.

The advantages offered by this coolant device are:

(*a*) The normal saline flow is controlled by a stopcock;

(*b*) The saline hits the revolving bur directly;

(*c*) Its use saves additional assistance which may be required elsewhere.

(*d*) It is easy to assemble and is portable.

DOUBLE REFLECTING SURFACES MIRROR

One instrument which we cannot do without in our daily practice is the conventional mouth-mirror. It is an absolute essential in dental surgery practice.

The many uses of the conventional mouth-mirror will be enhanced and increased if, instead of the usual manufacturer's name engraved on the rear surface, another reflecting surface is added to it by cold cure acrylic. Thus a double reflecting surface mouth-mirror is produced.

The advantages offered by this double mirror are twofold. Indirect vision is provided when preparing Class V cavities in both upper and lower jaws, while at the same time it is used as a cheek retractor, and the handle of the mirror is not in the operator's way. Secondly, it can be used as a tongue depressor and at the same time it reflects light on the operating field during the removal of impacted lower third molars.

CONCLUSION

These are but three of my personal adaptations in the field of daily dental practice. I hope that they may assist others or, better still, suggest some additional refinement to my fellow operators. ●