



Ideas and Innovations

The use of a styrofoam cup in leeching replanted digits

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Salvage of replanted digits compromised with venous congestion using leeches is well documented.^{1,2} However, the concept of leeching is frequently unpleasant, especially for children and their parents.

Callegari *et al.*³ described a tripod plaster of paris forearm dressing that forms the base for a funnel-shaped plastic splash shield that acts as a "leech amphitheater". This method requires the availability of the plastic shield (Darol, Inc., Cranston, R.I.). Furthermore, the shield cannot easily be removed because it is covered with plaster of paris to opacify the plastic.

Several other appliances to facilitate the leeches' attachment have been described including blotting paper, a cup, a "leech glass" (tube open on both ends), or a quill.⁴

We describe the use of a styrofoam cup for leeching replanted digits, as shown in the figure.

Method

A standard hand dressing with padding followed by a plaster of paris splint is applied to keep the elbow in flexion and the replanted digit exposed. A styrofoam cup is prepared by cutting an adequate hole in its base, through which the replanted digit is introduced. The cup is secured to the hand dressing with tape. Drainage of blood into the base of the cup is controlled with frequent replacement of dry gauze. The cup can be covered during leeching with either a plastic cap or any other suitable cover. Following leech satiation and spontaneous release from the digit, the leech is collected from the base of the cup. The cup is easily cleaned of any accumulated blood and can easily be removed or changed.

References

1. Brody GA, Maloney WJ, Hentz VR. Digit replantation applying the leech *Hirudo medicinalis*. *Clin Orthop* 1989; 245: 133-7.
2. Foucher G, Norris RW. Distal and very distal digital replantations. *Br J Plast Surg* 1992; 45: 199-203.
3. Callegari PR, Moore JH Jr, Degnan GG. The leech amphitheater for digital replantation. *Plast Reconstr Surg* 1992; 90: 511-3.
4. Adams SL. The medicinal leech: historical perspectives. *Semin Thromb Hemost* 1989; 15: 261-4.

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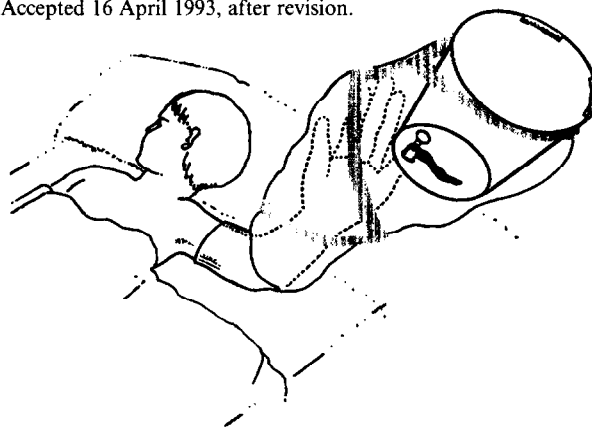


Fig. 1

Figure—Diagram of the cup *in situ*.