Surgical Pearl

Useful electrode modification for electrosurgery

Ahsan Hameed
Department of Dermatology, Shifa College of Medicine, Islamabad

Electrosurgery is increasingly being used in dermatology for the treatment of various skin disorders like warts, milia, molluscum contagiosum, skin tags and electroepilation etc. In Pakistan it becomes costly to use disposable electrodes for every patient, especially for electroepilation, which results in patient anxiety and concern about transmissible diseases like hepatitis and AIDS.

A convenient and cheap modification to an existing standard electrode can be made as follows: A needle threader as shown in Figure 1a is used for the purpose. It is cut with normal scissors along the line and the distal end wrapped around the exposed end of any standard electrode (Figure 1c). The attachment is secured with a narrow strip of a normal adhesive surgical tape wound tightly so as to maintain a good electrical connection. The fine steel wire of the needle threader is cut with scissors so as to achieve the desired length (Figure 1d). The fine needle electrode is now ready for use, for electroepilation or electrodessication.

It is important to cut the fine steel wire at an angle so as to leave the cut edge beveled. This makes penetration of the needle easy. The preparation takes only a few minutes, and therefore, a new needle can be used for every patient, thus making the system disposable at a very low cost. If electrodes cannot be spared for this purpose, or if the clinician is unusually busy, then steel nails can be used instead. Steel nails are available in different sizes, the appropriate size that fits the hand piece of the machine can be selected. The flat head of the nail is cut with pliers to achieve the desired length, and the needle threader wrapped as described earlier. A number of such electrodes can be prepared in advance and used as and when required. The cost of the needle threader is Rs. 5 only, and is easily available in most general stores. Like conventional electrodes, the fine wire of the threader is made of stainless steel which does not rust and does not cause any adverse effects like tattooing etc.

Such electrodes come in handy for electroepilation or electrodessication of small lesions like, molluscum contagiosum, spider nevi, milia, tiny warts and comedones etc., where the needle can actually be inserted into the lesion and the lesion burnt from within which gives better results.

Address for Correspondence
Dr. Ahsan Hameed,
Associate Professor of Dermatology,
Shifa College of Medicine, H-8/4, Islamabad.
E mail: ahsanhameed23@hotmail.com
Figure 1 Steps in the modification of an electrode, a) a needle threader which has to be cut along the line as shown, b) cut distal end of the needle threader, c) a sample of a standard electrode which can be modified, and d) needle threader cut to proper dimensions and wrapped around the electrode, ready for use.

Pakistan Association of Dermatologists is holding its Silver Jubilee Conference at Karachi from 9th to 12th December, 2004 at Karachi. JPAD will publish a special issue on this historic occasion. Readers are requested to fully contribute about the achievements/challenges to dermatology in Pakistan, and history of and achievements by their departments. Manuscripts should reach the Editorial Office by 30th June, 2004.