

Monopolar Diathermy: 2 Instruments, 1 Hand

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Diathermy entails the implementation of high-frequency electrical currents to produce heat and either make incisions or induce coagulation.

Monopolar cautery involves disposable cautery pencils and electrosurgical diathermy units. In typical monopolar cautery, an electrical plate is placed on the patient's skin and acts as an electrode, while the current passes between the instrument and the plate. Although monopolar diathermy can interfere with implanted metal devices and pacemaker function,¹ in plastic surgery the technique is more frequently deployed than is bipolar diathermy, where the current passes between the forceps tips and not through the patient. Pedal-operated monopolar diathermy forceps offer an alternative to this method. However, pedal-operated monopolar forceps are not always available. This letter briefly describes a diathermy technique we employ in our practice that involves both Adson forceps and a cautery pencil.

Traditionally, the plastic surgeon holds the Adson forceps, while an assistant touches the cautery pencil to the forceps, thus creating the current's passage.² Adequate skin retraction and vertical positioning of the forceps can help prevent inadvertent wound edge necrosis.³ In our practice, we have found that for superficial skin surgeries, holding both the cautery blade and the Adson forceps in 1 hand can be quite helpful, especially when a surgical assistant is unavailable. With this method, the surgeon holds the Adson forceps with the first 3 fingers of one hand, while the blade of the cautery pencil is inserted at the forceps' most proximal section, between the 2 branches. The cautery pencil is held upside-down in the palm's center; the cautery button is operated by the ring finger (Figure 1). This leaves the surgeon's other hand free to hold a skin hook or any other required instrument (Figure 2).

We find this method for obtaining hemostasis helpful in minor surgery sessions, both in plastic surgery and dermatology settings, where budgetary restrictions may limit instrument availability or nursing staff.



Figure 1. The cautery pencil is held upside-down in the middle of the palm; the ring finger of the same hand operates the cautery button.

Disclosures

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

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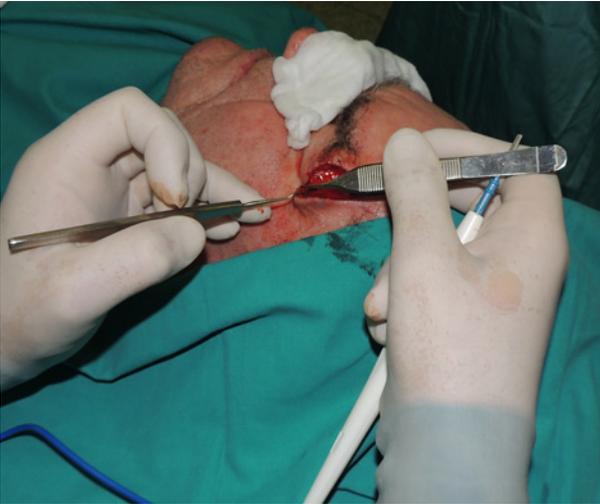


Figure 2. Holding the forceps and cautery pencil as previously described leaves the surgeon's other hand free to hold a skin hook.

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