Adhesive Tape to Guide Injection Depth of Botulinum Toxin for Axillary Hyperhidrosis

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OnabotulinumtoxinA for treating axillary hyperhidrosis requires a 2- to 3-mm depth of injection. This small depth is difficult to accurately estimate once the needle tip is in the skin. We have found that measuring 2 to 3 mm on the needle tip and then wrapping a piece of adhesive tape at that point acts as a depth guide.

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Practice Gap

OnabotulinumtoxinA is a US Food and Drug Administration–approved second-line treatment of axillary hyperhidrosis, with a long-term success rate greater than 80% and minimal adverse effects. The recommended depth and angle of injection of onabotulinumtoxinA for most cases of primary hyperhidrosis is 2 to 3 mm at a 45° angle to the skin surface. This small depth is difficult to accurately estimate once the needle tip is in the skin.

Injection Technique

We have found that measuring 2 to 3 mm on the needle tip and then wrapping a piece of adhesive tape at that point acts as a depth guide (Figure 1). The flag shape of the tape acts as a physical barrier to prevent the needle tip from penetrating too deeply (Figure 2). This barrier also allows the injector to inject quickly to reduce the amount of pain that the patient experiences.

Practice Implications

Applying adhesive tape to a needle tip at a premeasured distance is a fast, inexpensive, and effective tool to aid accurate depth of injection for both experienced clinicians and clinicians in-training. The tape is a common office supply



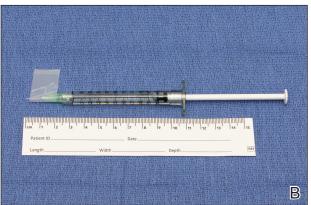


FIGURE 1. A, Setup for injection of botulinum toxin to treat axillary hyperhidrosis, demonstrating how adhesive tape has been premeasured 2 to 3 mm from the needle tip. B, Adhesive tape applied to the needle tip.

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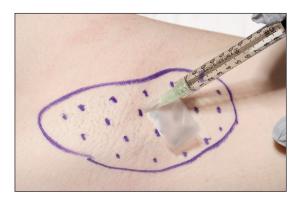


FIGURE 2. Demonstration of botulinum toxin injection technique for axillary hyperhidrosis, with adhesive tape as a barrier at a 2- to 3-mm injection depth.

and the amount of tape used for a patient costs a fraction of a cent. Additionally, applying the tape takes less than 1 minute. This technique is useful for axillary hyperhidrosis injection (Figures 1 and 2) but could be used in palmar and plantar hyperhidrosis injections as well as injections other than onabotulinumtoxinA that require a specific fixed depth.

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