

*Letter to the editor*

## A simple method to advance a winged epidural needle

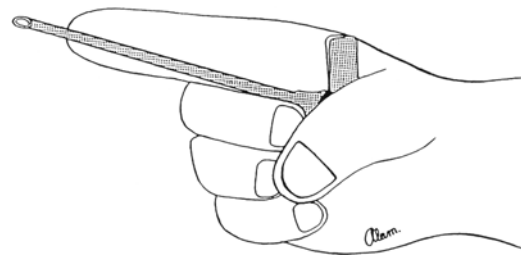
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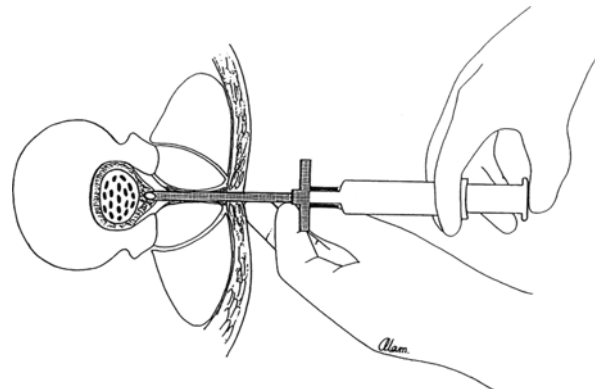
### To the editor:

Despite numerous publications concerning techniques for identification of the epidural space, little interest has been focused on the control of the advance of the epidural needle, which we believe is the most difficult part to learn and seems daunting to the beginner. The following technique with a standard winged Touhy epidural needle has been employed in our institution. We have found it to be satisfactory for controlling the needle and preventing sudden forward movement that can result in inadvertent dural puncture.

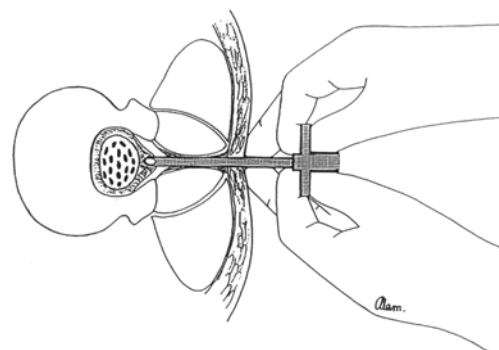
The prominent feature of our technique is the position of the finger(s), placed on the shaft of the needle throughout the procedure. Fig. 1 shows the grip during the procedure of fixing the needle in the interspinous ligament. While advancing the needle with the stylet in place, the index finger of the operator's dominant hand provides steady support to the long axis of the shaft, leading it in the right direction. The needle, without the stylet, is then advanced steadily using either of the following techniques until it reaches its final destination. Fig. 2 shows the grip for the loss of resistance technique. The thumb and the index finger of the operator's non-dominant hand that grasp the wing impart constant forward motion to the needle, while the middle finger on the shaft controls the advance of the needle against the patient's back. The other hand applies constant pressure on the plunger. The grip for the hanging drop technique, where the needle is advanced with both hands, is shown in Fig. 3. The palmar surfaces of the middle fingers are braced against the shaft of the needle and the tips against the patient's back. Every millimeter of the advance and direction of the needle can be easily controlled.



**Fig. 1.** The needle is gripped and the shaft is supported by the index finger



**Fig. 2.** Grip for the loss of resistance technique



**Fig. 3.** Grip for the hanging drop technique

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The “Bromage” grip [1] is ideal for wingless needles. We believe, however, that our technique with a winged needle also helps precise positioning and a gradual and controlled advance with little risk of unintentional dural puncture, providing a high success rate.

### Reference

1. Bromage PR (1978) Epidural analgesia. Saunders, Philadelphia, pp 176–214