we often are faced with balancing the lack of scientific proof with experience, clinical judgment, and compassion.

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An Alternative Needle Geometry for Interruption of the Ganglion Impar

To the Editor — The ganglion impar, also known as the ganglion of Walther, lies in the retroperitoneal space at the level of the sacrococcygeal junction. It is a solitary structure representing the fused terminus of the paired, paravertebral sympathetic chains. Interruption of the ganglion, first described in 1990 by Plancarte et al., has been an approved treatment for managing intractable, sympathetically mediated, perineal pain.

The approach used, as described by Patt and Plancarte, involved lifting a skin wheal over the level of the sacrococcygeal ligament and advancing a needle to the retroperitoneal space under fluoroscopic guidance. Radiopaque dye was instilled to confirm final needle position. Traditional 22-gauge, 8.89-cm spinal needles, single- and double-bent as advocated in previous techniques, were initially used, although because of difficulties encountered during placement, an alteration of needle geometry was required.

Our initial patient, a 41-yr-old woman with squamous cell carcinoma of the anus, suffered unremitting burning pain along the anorectal column after radiation therapy. Difficulty in placing the needle was attributed to fibrosis along the needle path. However, by bending the needle to the shape of an arc (fig. 1), thus removing any angulation, we were more easily able to navigate the curvature of the presacrococcygeal (postrectal) space (fig. 2). A local anesthetic blockade was accomplished without complication. At a later date, the patient received a successful neurolytic block in a technically easier procedure using the curved needle.

Our second patient, a 23-yr-old man who developed anorectal, burning pain after a gunshot wound to the pelvis, was successfully blocked with the curved needle while using a second needle to identify the bony coccyx.

The major advantage of the curved needle is its ease of placement. Unlike a bent needle, which displaces tissues along its plane of angulation, a curve needle inserted following its arc will not. This is akin to a curved suture needle, which is driven in a rotating fashion along its arc. There is subsequently less trauma to the tissues.

A second advantage of the curved needle is the ability to use the stylet, which provides more rigidity and stability for improved control during placement and avoids clogging of the needle. Further, bending the needle may weaken it, allowing the possibility

Fig. 1. Straight and curved 3.5-inch, 22-gauge spinal needle. Note the bevel direction (inset).
of breaking if care is not properly exercised during its manipulation.

Bevel orientation was carefully considered in our final design. The needle aperture was placed toward the outer curvature (fig. 1 inset) to lessen the possibility of damaging underlying caudal structures. However, we uncovered another potential advantage of this bevel orientation, which is the needle's inherent property, as described in previous studies, to deflect following its arc as it is advanced.

In conclusion, the technique of ganglion impar interruption is becoming an important alternative approach to managing intractable perineal pain of sympathetic origin. We believe that our curved needle modification provides advantages that further facilitate the technique.

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