

of tourniquet-induced analgesia, the search for a more reliable and effective agents should continue.

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*In Reply:*—We welcome the opportunity to again respond to Dr. Manchikanti. As we have stated previously, as no controlled clinical trials have proven the benefit of intravenous regional bretylium (IRB) in reflex sympathetic dystrophy (RSD), the issue remains controversial.<sup>1</sup> We have clinical experience and basic science evidence for the effectiveness of bretylium in producing temporary sympathetic blockade. We have demonstrated by thermography the presence of sympathetic blockade 36 h after IRB. As pointed out by Dr. Manchikanti and others (Hanowell,<sup>2</sup> Ramamurthy<sup>3</sup>), there may be large variability in the response to sympatholytic techniques in individual patients, and one technique may be more efficacious at sympathetic blockade than another in a given patient. We have found this true in our practice.

However, the broader issue is the effectiveness of this blockade for the treatment of RSD. Clearly, sympathetic blockade is not a curative therapy for RSD and may be beneficial only to the extent that it allows for more active physical therapy. It does not surprise us, therefore, that the four patients in Dr. Manchikanti's study who did not obtain relief with stellate or lumbar sympathetic block may also not respond to IRB.

The problem is not the lack of an "effective" sympatholytic agent, but rather the lack of an understanding of the pathophysiology of this symptom complex. Until this basic knowledge is available, we must continue to emphasize the multidisciplinary, multimodality approach to the therapy for RSD.

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## Doppler-guided Axillary Block in a Burn Patient

*To the Editor:*—Axillary nerve blocks can be difficult to perform if one cannot palpate the axillary artery pulsations to locate the axillary sheath. A 58-yr-old woman with a burn to the dorsum of her left hand came to the operating room for a tangential escharotomy and placement of a split-thickness skin graft. Her past medical history included long-standing rheumatoid arthritis, hypertension, stable angina, and congestive heart failure.

Multiple observers were unable to palpate the axillary artery due to the large size of her arm and her significant vascular disease. With the use of a Doppler Flowmeter (Parks Medical Electronics Inc.) probe, the axillary artery was easily located. A 22-G × 2-inch short beveled needle was advanced parallel to the Doppler probe, and a paresthesia was obtained. The local anesthetic was injected and a successful block occurred. A field block was used for the donor site on the right thigh.

## REFERENCES

1. Ford SR, Forrest WH, Eletherington L: The treatment of reflex sympathetic dystrophy with intravenous regional bretylium. *ANESTHESIOLOGY* 68:137-140, 1988
2. Hanowell LH, Kanefield JK, Soriano SG: A recommendation for reduced lidocaine dosage during intravenous regional bretylium treatment of reflex sympathetic dystrophy. *ANESTHESIOLOGY* 71:811-812, 1989

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## REFERENCES

1. Ford SR, Johnston RV: Intravenous guanethidine and reserpine in reflex sympathetic dystrophy (letter to the editor). *Pain*, in press.
2. Hanowell LH, Kanefield JK, Soriano SG: A recommendation for reduced lidocaine dosage during intravenous regional bretylium treatment of reflex sympathetic dystrophy. *ANESTHESIOLOGY* 71:811-812, 1989
3. Ramamurthy S, Hoffman J, Walsh N, Schoenfield L: Role of tourniquet-induced analgesia in iv regional sympatholysis (abstract). *ANESTHESIOLOGY* 65:A207, 1986

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To our knowledge, there has been only one prior report<sup>1</sup> of the use of a hand-held Doppler probe to assist in locating the axillary artery for a difficult axillary block. This technique has also been used for difficult intercostal<sup>2</sup> and supraclavicular brachial plexus<sup>3</sup> nerve blocks. It should be considered for any difficult nerve block where vascular landmarks are used but are not readily found.

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