# Between Innovation and Proven Value: Achieving a Balance in Technical Reporting

This issue of *Regional Anesthesia and Pain Medicine* includes a new section of the journal—the "Brief Technical Report." The concept is to create a middle ground that encourages publication of new techniques and innovations in regional anesthesia and pain medicine. Why middle ground? Because editorial boards occasionally find themselves conflicted about publishing promising innovations that are long on enthusiasm and theory, but short on sufficient clinical experience to permit assessment of outcome, risk, and benefit. To indiscriminately publish every new block technique would promote a "this is how I do it" mentality, which is the antithesis of evidence-based practice. Yet insisting on reporting new innovations or techniques only after they have been evaluated by statistically powerful prospective clinical trials perhaps inappropriately delays our readership's desire to remain on the cutting edge. Indeed, the early reporting of promising technical innovations may arguably promote earlier critical interest and further study.

The "Brief Technical Report" (BTR) may encompass a variety of topics—from descriptions of new block techniques, to equipment innovations, to novel methods of efficiently moving patients through an induction room or pain clinic. *Regional Anesthesia and Pain Medicine* will seek to accept only those manuscripts that clearly define why a new technique is justified or better than its alternatives, and that provide a reasoned scientific or anatomic basis upon which the innovation is conceived. Investigators will be asked to predict or preliminarily document the benefits and risks of their ideas. By now, insightful readers have likely made a mental note that reading BTRs will require a different mindset. While the BTR will hopefully present an interesting concept or potential improvement for one's practice, it clearly should be interpreted and weighed differently than a randomized clinical trial. Our hope is that these preliminary reports of potentially important technical innovations will motivate the authors, and/or other investigators, to perform the necessary clinical studies that properly guide our practice.

I believe the accompanying article by Dr. Boezaart's group from the Regional Anesthesia Study Center at the University of Iowa provides an excellent first offering for the BTR concept.[1] Their report of a cervical paravertebral approach to the brachial plexus is based on perceived need, anatomic knowledge, and a reasonably large initial experience with the technique. Desiring to provide patients suffering from acute or chronic shoulder pain acceptable analgesia with minimal motor block, Boezaart et al reasoned that placing a continuous catheter via the posterior approach would deposit local anesthetic nearest to the sensory fibers of the brachial plexus roots, and away from the more anterior motor fibers. Their early experience with a previously described posterior approach[2] was unsatisfactory because of significant pain induced by the needle traversing the paraspinal neck extensor muscles. By redirecting the needle between muscle groups, Boezaart et al were able to avoid significant pain, yet reliably attain brachial plexus blockade. The authors also speculate that this approach may lessen the frequency of paresthesia and dysesthesia that has been reported with continuous catheter techniques using the more conventional interscalene ap-

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proach.[3] Similarly, it might reduce the confusing observations of non-brachial plexus stimulations (for example, the suprascapular or spinal accessory nerves) that can be observed when using the interscalene approach. After treating over 1,000 patients, the Iowa group felt they had sufficient experience to report their new technique. So far, so good. However, what Boezaart et al cannot tell us is perhaps just as important as the technical details they have so meticulously described. Without a prospective, sufficiently large, and carefully followed cohort of patients, one can only speculate about the relative frequency of "classic" brachial plexus block side-effects—phrenic or recurrent laryngeal nerve paresis, or cervical sympathetic chain blockade. Similarly, is a needle that traverses 4 to 6 cm of (primarily, but not exclusively) neck muscle really as safe as its anterolateral cousin that traverses only a centimeter or two of soft tissue before reaching the brachial plexus? Perhaps most critical, will this promising technique really improve the success rate and outcomes of continuous brachial plexus anesthesia at an equal or reduced risk when compared with the interscalene or intersternocleidomastoid approaches? My personal belief is that what regional anesthetists really need more than the description of yet another technique are randomized clinical comparisons and outcome data of the techniques we already have at our disposal. To their credit, Boezaart et al are currently preparing some of their outcome data for publication, and are embarking on prospective comparative trials. We eagerly await their results, just as the editorial board sincerely values your thoughts on the Brief Technical Report concept.

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## References

1. Boezaart AP, Koorn R, Rosenquist RW. Paravertebral approach to the brachial plexus: An anatomic improvement in technique. *Reg Anesth Pain Med* 2003;28:241-244.
2. Pippa P, Cominelli E, Marinelli C, Aito S. Brachial plexus block using the posterior approach. *Eur J Anaesth* 1990;7:411-420.
3. Borgeat A, Ekatodramis G, Kalberer F, Benz C. Acute and nonacute complications associated with interscalene block and shoulder surgery. A prospective study. *Anesthesiology* 2001;95:875-880.