

IN RESPONSE

Our survey (1) did not include a question asking about the type of needle used for transforaminal epidurals, but I suspect that most if not all the instructors use short bevel needles. Most practitioners using blunt needles were trained by Gabor Racz or his disciples (2-4). Because of the hassle of using a two needle technique, I do not use blunt needles, but I may re-evaluate the technique. I respect the opinions of Dr. Racz and logically it would seem that there would be less chance of penetrating an artery with a blunt needle (5). I do however agree that whether or not a blunt tip needle will prevent inadvertent injection into an artery is conjecture and I also agree with your

comment that using these needles could potentially cause other unforeseen complications. Dr Racz has however trained many physicians using his techniques and I would defer to his expertise.

For the reasons you and I discussed, the magnitude of these catastrophic complications remains speculative (6-14). The fact that we are all aware of these problems and they are being discussed in open forums will hopefully lead to safer practices. I personally believe that injection of particulate matter into the vertebral artery is the primary cause of the majority of the catastrophic complications. I did however read with interest the study Huntoon et

al (15) describing branches of the deep and ascending cervical arteries passing first ventral through the intervertebral foramen but deep within the foramen the arteries pass more dorsal. In addition in one cadaver a radicular artery was seen dorsal to the nerve root. Cord infarcts could be caused by inadvertent injections into these arteries.

I continue to perform transforaminal injections for pain secondary to bony or soft-tissue foraminal dynamic/static stenosis. Although I will still use a small (~.25 ml) volume of Kenalog when there is no evidence of vascular uptake, in many cases I only use non-particulate Decadron.

The real question is whether societies, medical device companies, or private practice groups should continue training novice injectionists. Fifteen years ago, we began training physicians because at the time the only courses were being held by device companies. There were only a few university-based programs that taught fluoroscopically guided injection techniques. Although perhaps an honorable endeavor in the beginning, this has resulted in an exponential increase in physicians trained in weekend courses (16). For someone who is self trained by trial and error, it is perhaps disingenuous for me to suggest that there are now enough good university and specialized fellowship programs to re-evaluate the current state of affairs. I have, however, no illusion that anything will change in the near future.

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Richard Derby, MD

Spinal Diagnostics & Treatment Center
901 Campus Dr., #312
Daly City, CA 94015
Email: rderby@spinaldiagnostics.com