Allay Patient Fears Before Nail Surgery Anesthesia

BY JEFF EVANS
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WASHINGTON — Efforts to take patient comfort and safety into account when giving anesthesia for nail surgery may pay off in greater self-confidence during procedures, Dr. Nathaniel J. Jellinek said at the annual meeting of the American Academy of Dermatology.

When the topic of nail surgery or biopsy arises, most patients will be "quite apprehensive;" therefore, it is crucial to achieve total anesthesia with as little discomfort as possible and to approach the procedure with confidence, said Dr. Jellinek of the department of dermatology at Brown University, Providence, R.I.

"If you're not successful at [anesthesia], the patients will never come to you. You'll never do [the surgery] again because you'll be intimidated by the procedure that went wrong," he said.

When giving anesthesia, it's advisable to recline patients even if they say they don't need it and to have an assistant hold their hand and distract them with conversation.

It is also a good idea to use a distracting stimulus prior to needle insertion (gripping the finger firmly, flicking the finger, or anesthetizing the injection site with a cryogen spray) and to tell patients that the injection is coming, he said.

"It's very important to not fill the nail fold quickly, because it's probably the distention of the tissue as much as the needle prick that causes a lot of pain," he said.

There have been two randomized, double-blind studies that examined the value of using a topical anesthetic to prevent the pain of a digital nerve block of the great toenail: One found that EMLA cream (2.5% lidocaine and 2.5% prilocaine) significantly reduced visual analog pain scores, compared with placebo (Eur. J. Anaesthesiol. 2000;17:182-4), whereas the other showed no benefit for EMLA cream (Acta Anaesthesiol. Scand. 2002;46:203-6).

Dr. Jellinek said that he uses topical anesthetic only when a patient is really apprehensive about the anesthesia.

In such cases, he said that applies EMLA cream 2 hours ahead of time and occludes it with plastic wrap or Tegaderm dressing and tells the patient that it may help a little bit.

"I think it helps with the pinprick," he said. Some people think that the effect of EMLA cream extends 5 mm deep, but "I don't think it's going to help with the slow distension of tissues," he said.

Although epinephrine has traditionally not been "allowed" during a digital block, Dr. Jellinek does not view it as an absolute contraindication. He does not usually use it, however, because most nail surgeries last fewer than 30 minutes and do not need prolonged anesthesia. "You can do [a distal block] competently, without any epinephrine, without any neurovascular damage risk," he said.

Of 50 cases of digital gangrene associated with local anesthesia in the literature, 21 occurred with the use of epinephrine. Most cases occurred before 1950, when procaine was used. Epinephrine was not a component of the anesthetic in most cases of gangrene, but when it was, very high concentrations were used, he noted.

If epinephrine is used, Dr. Jellinek made several recommendations:

► Use a 1:200,000 concentration with a minimal volume that corresponds to the size of the digit.

► Avoid a circumferential buildup of fluid when performing a ring block.

► Buffer anesthetics to avoid greater tissue acidosis than already present in ischemia.

► Avoid postoperative hot soaks.

► Look out for vasospastic patients.

► Consider having nitroglycerin or phentolamine on hand.

Dr. Jellinek performs most of his nail surgeries with a distal wing (local) block, which is infiltrative and gives immediate-onset anesthesia.

Epinephrine is not really necessary because the volume of anesthetic solution provides hemostasis.

An injection at each lateral nail fold is usually enough to carry the anesthetic to the junction of the hyponychium and the lateral nail folds. It is necessary to have a distracting stimulus for a wing block, such as a cryogen spray, Dr. Jellinek advised.

In a digital block, two nerves on each side of the digit are blocked at its base. He usually reserves the digital block for Mohs surgery on nail tumors. It also is necessary to wait at least 10 minutes for the nerve block to take effect. ■