INFOGRAPHICS IN ANESTHESIOLOGY

Complex Information for Anesthesiologists Presented Quickly and Clearly

How Low Can You Go?

The ideal location for local anesthetic injection for sciatic nerve blocks is debated.\(^1\) Options include:

**Extraneurial injection**
- Slower onset
- Less success
- Established approach

**Intraneurial injection**
- Faster onset
- Greater success
- Safety in question

5 weeks after a 15 ml extraneurial injection, axonal dysfunction is observed with a significant reduction in action potential amplitude.\(^2\)

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Cappelleri et al.\(^1\) determined the **minimum intraneurial volume** to achieve a sciatic nerve block:

- ropivacaine 1%
- 6.6 ml intraneurial (95% CI, 6.4 to 6.7)
- 19 ± 12 min onset time

**Complete sciatic nerve block**

Despite the reduced intraneurial volume utilized, axonal dysfunction with reduced action potential amplitude was observed at both 5-week and 6-month follow-ups.

While the persistent electrophysiologic changes observed did not have any associated clinical symptoms, additional study of longer-term outcomes for intraneurial injections is necessary.

Infographic created by Jonathan P. Wanderer, Vanderbilt University Medical Center, and James P. Rathmell, Brigham and Women’s Health Care/Harvard Medical School. Illustration by Annemarie Johnson, Vivo Visuals. Address correspondence to Dr. Wanderer: jonathan.p.wanderer@vanderbilt.edu.