Cervical Transforaminal
Step-by-Step Guide on Coudé® Blunt Needle Placement

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Minimizing Risk. Every Injection. Every Time.™
Place the patient in the supine position. Palpate the posterior lateral border of the cervical spine. Using a marking pen, mark the posterior border of the transverse process.

Under fluoroscopy, find the target neural foramen using a 30° oblique fluoroscopic view and place a kelly metal or pointer over the target site. Mark the level on the previously placed line, outlining the posterior border of the transverse process which will be the entry site for the introducer cannula.
Remove the metal needle of the introducer. Maintain the lateral C-arm position and introduce the Coudé® Blunt needle through the blue hub with the arrows of the needle tip facing posterior. Advance the blunt needle until you experience bony contact on the lateral border of the transverse process.

After infiltration of local anesthetic at the needle entry site, place the C-arm in lateral position. Advance the introducer needle to the target site at the lateral (arrow) border of the transverse process until bony contact is encountered.
(A) Rotate the C-arm to the 30° oblique view from horizontal. Rotate the Coudé® Blunt needle 180° to the anterior position, having the arrows of the hub readily visible. (B) Advance the needle tip until it is visible in the neural foramen.

(A) Rotate the Coudé® Blunt needle back to 180° to a posterior direction and advance allowing for the needle to slide on a bone behind the nerve root. Rotate the C-arm to the A/P position. (B) On the A/P view, advance the needle to mid facet position. First aspirate, then inject contrast to verify the absence on the intravascular injection. Once this has been verified, the local/steroid of choice is injected.

*Please refer to current literature for volumes and medications used for injections.
The Epimed Blunt Needle is a PND (Percutaneous Navigational Device) designed to deflect off nerves and arteries. Clinicians use the blunt needle for atraumatic access to nerve blocks, sleeve blocks, deep muscle blocks, hypogastric, paravertebral blocks, joint blocks, facets, selective nerve root, lumbar sympathetic, thoracic sympathetic, splanchnic, and celiac plexus blocks. Based on animal studies and clinical experience, there have been no reported disasters. The Coudé® (curved) version of the blunt needle includes a bend in the cannula near the distal end. It allows for precise tip placement even with difficult to reach target areas. When the device is delivered close to the target, with repeated small movements, it can navigate around structures to reach the target point of injection. Blunt needles do not penetrate skin and muscles easily, therefore, an introducer is needed to deliver the blunt needle as close as possible to the safest site.

The Coudé® Blunt Needle may reduce the chance of intravascular and intraneural injection or damage, excessive bleeding, damage of the organs, and segmental spinal cord arterial injection or damage. I am unaware of any reported cases of serious intra-arterial or intraneural injection-related complications.

Designed with PointGuard™ Advantage, the blunt needle features an atraumatic distal tip with a circular side port for safety, maximum flow rate, and strength. It includes depth markings to assist in indicating accurate placement and printed arrows on the hub to show direction of the curve and side port.

Epimed offers multiple gauge sizes and lengths to accommodate different approaches, target sites, and patient sizes. The 25g blunt needle is the smallest blunt needle on the market.

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<th>20g</th>
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20g blunt needles are packaged with an introducer and sold separately.

5.7" introducer (#135-1857) is also available and sold separately.

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22g blunt needles are not packaged with an introducer, only sold separately.

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If you would like more information on blunt needles, contact your local Epimed Clinical Sales Consultant.
Blunt Needle Literature & Scientific Articles

Epimed provides scientific articles & literature regarding the use of blunt needles. For a complete list, please visit www.epimed.com

Root Cause of Analysis of Paraplegia Following Transforaminal Epidural Steroid Injections: The ‘Unsafe’ Triangle
Author(s): Glasses SE, Shah RV
Summary: Pain Physician, 2010; 13: 237-244
Published: May 2010

Cervical Spinal Canal Loculation and Secondary Ischemic Cord Injury - PVCS - Perivenous Counter Spread - Danger Sign!
Author(s): Heaver JE, Racz GB
Summary: Pain Practice, Vol. 8, Issue 5, 2008; 399-403
Published: September 2008

¹ The Blunt Needle: A Percutaneous Access Device
Author(s): Akins EW, Hawkins IF Jr, Mladinich C, Tupler R, Siragusa RJ, Pry R
Published: January 1989

Anatomy of the Cervical Invertebral Foramina: Vulnerable Arteries and Ischemic Neurologic Injuries After Transforaminal Epidural Injection
Author(s): Huntoon MA
Summary: Pain 117, 2005; 104-111
Published: September 2005

Paraplegia After Lumbosacral Nerve Root Block: Report of Three Cases
Author(s): Houten JK, Errico TJ
Summary: The Spine Journal, 2002; 70-75
Published: April 2003

Cervical Transforaminal Epidural Steroid Injections: More Dangerous Than We Think?
Author(s): Scanlon GC, Moeller-Betram T, Romanowsky SM, Wallace MS
Summary: SPINE, Vol. 32, Issue 11, 1249-1256
Published: May 2007

² Sharp Versus Blunt Needle: A Comparative Study of Penetration of Internal Structures and Bleeding in Dogs
Author(s): Heavner JE, Racz GB, Jenigiri B, Lehman T, Day MR
Published: September 2003

Cervical and High Thoracic Ligamentum Flavum Frequently Fails to Fuse in the Midline
Author(s): Link P, Kolbitsch C, Putz G, Colvin J, Colvin HP, Lorenz I, Keller C, Kirchmair L, Rieder J, Moriggl B
Summary: Anesthesiology, Vol. 99, No. 6, 2003; 99: 1387-90
Published: December 2003

To watch this procedure or read more articles, visit paincast.com.