## INTRODUCTION

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.<sup>2</sup> Based on animal studies and clinical experience, there have been no reported disasters.<sup>1</sup> 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 targeted 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 damages, 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<sup>™</sup> 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. Our 25g blunt needle is the smallest blunt needle on the market.

20g	BLUNT I	NEEDLES	INTRODUCERS	
Length	Coudé <sup>®</sup>	Straight	Coudé® / Straight	
4.5"	117-2045	116-2045	Included	
6.0''	117-2060	116-2060	Included	
8.0"	117-2080	116-2080	Included	

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

<sup>\*5.7&</sup>quot; introducer (#135-1857) is also available and sold separately.

22g	BLUNT N	NEEDLES		INTRODUCERS		
Length	Coudé <sup>®</sup>	Straight	Length	Coudé®	Straight	
3.0"	117-2230	116-2230	2.5"	135-1825	135-1825	
4.5'"	117-2245	116-2245	3.0" 3.7"	 135-1837	136-1730	
6.0"	117-2260	116-2260	3.0" 3.7"	 135-1837	136-1730	

<sup>\*22</sup>g blunt needles are **not** packaged with an introducer, only sold separately.

25g	BLUNT N	BLUNT NEEDLES		INTRODUCERS		
Length	Coudé®	Straight	Coudé®	Straight		
2.5"		116-2525	Introducer not Included			
3.5"	117-2535	116-2535	Included			

<sup>\*</sup>Please contact your local Epimed Clinical Sales Consultant for more information.

## \*REFERENCES

- \*Epimed provides scientific articles & literature regarding the use of blunt needles. For a complete list, please visit www.epimed.com
- 1. The Blunt Needle: A Percutaneous Access Device Author(s): Akins EW, Hawkins IF Jr, Mladinich C, Tupler R, Siragusa RJ, Pry R Summary: AM J Radiology. 1989;152:181-182. Published: January 1989
- 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 Summary: Pain Practice, Vol. 3, Issue 3, 2003: 226-231. Published: November 17, 2003
- 3. Root Cause of Analysis of Paraplegia Following Transforaminal Epidural Steriod Injections: The 'Unsafe' Triangle Author(s): Glasses SE, Shah RV Summary: Pain Physician, 2010; 13:237-244, ISSN 1533-3159. Published: April 22 2010
- 4. Cervical Spinal Canal Loculation and Secondary Ischemic Cord Injury PVCS Pervenous Counter Spread Danger Sign! Author(s): Heaver JE, Racz GB Summary: Pain Practice, Vol. 8, Issue 5, 2008 399-403. Published: August 6 2008
- 5. Anatomy of the Cervical Invertebral Foramia: Vulnerable Arteries and Ischemic Neurologic Injuries After Transforaminal Epidural Injection Author(s): Huntoon M Summary: Pain 117, 2005; 104-111. Published: May 27, 2005
- 6. Cervical Transforaminal Epidural Steroid Injections: More Dangerous Than We Think? Author(s): Graham C, Scanlon, Tobias Moeller-Betram, Romanowsky SM, Wallace MS Summary: SPINE, Vol. 32, Issue 11, 1249-1256. Published: 2007
- 7. Cervical and High Thoracic Ligamentum Flavum Frequently Fails to Fuse in the Midline Author(s): Lirk 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: August 7, 2003
- 8. Paraplegia After Lumbosacral Nerve Root Block: Report of Three Cases Author(s): Houten, Errico Summary: The Spine Journal, 2002: 70-75. Published: April 23, 2003

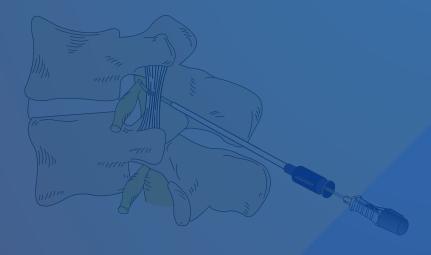


13958 Diplomat Drive • Dallas, TX 75234
Toll Free: 800.866.3342 • Phone: 972.373.9090
info@epimed.com • epimed.com

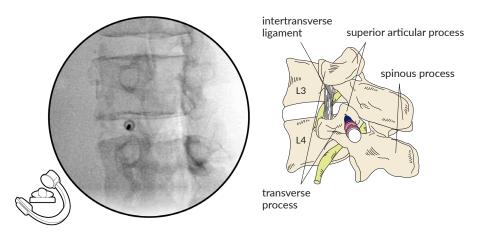
**Disclaimer: This brochure is intended for general education only.** Please refer to current literature for volumes and medications used for injection.

## LUMBAR TRANSFORAMINAL

Step-by- Step Guide on Coudé<sup>®</sup> Blunt Needle Placement By Dr. Gabor B. Racz M.D., FIPP, ABIPP, DABPM

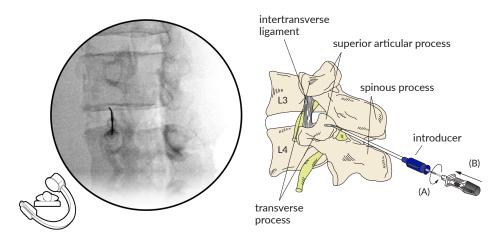


Minimizing Risk. Every Procedure. Every Time. \_\_\_\_\_ EPIMED



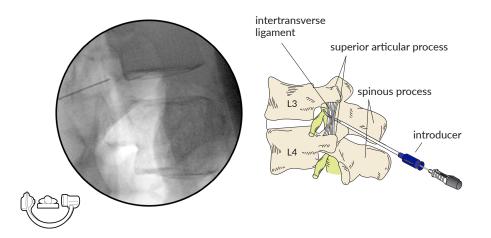
Rotate the C-arm to an oblique view (sideways) until the spinous process moves to the other side of the superior articular process (SAP). It is very difficult to get a Coudé® Blunt Needle close to the target without an introducer. The target position for the introducer is at the tip of the superior articular process (SAP), also known as the "Scottie Dog's" ear. This will establish a safe bony target which is behind the nerve root.

3



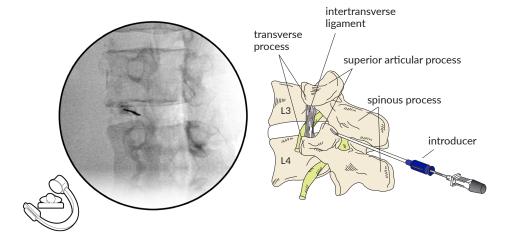
(A) Once bony contact is made with the "Scottie Dog's" ear (SAP), rotate the arrow on the needle hub 180° laterally while (B) advancing the Coudé® Blunt Needle beyond the SAP.

5



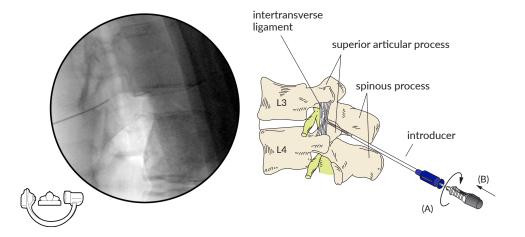
The needle tip will enter the neural foramen with enhanced safety as the Coudé® Blunt Needle is less likely to penetrate blood vessels. Now the needle tip now has access to any part of the neural foramen. Confirm the needle position with A/P and lateral fluoroscopic visualization. Inject contrast to verify the spread followed by injection of local anesthetic and steroids. The most commonly chosen target site is all the way to the ventral lateral epidural space until bony contact is made.

2



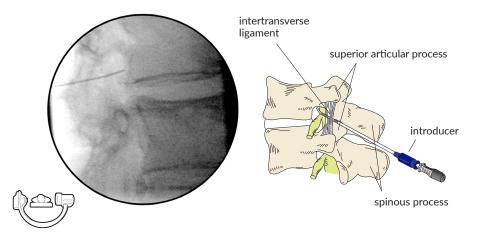
Remove the metal needle of the introducer. Advance the Coudé® Blunt Needle through the blue hub with the arrows of the hub facing medially until it touches the tip of the "Scottie Dog's" ear (SAP).

4



(A) Anterior to the "Scottie Dog's" ear (SAP), rotate the needle hub 180° medially. (B) Advance through the intertransverse ligament until you feel a "pop", then rotate the C-arm to a lateral view.

6



The Coudé® Blunt Needle tip can be steered to the ventral lateral bony structure of the neural foramen. Confirm the needle position with A/P & lateral fluoroscopic views. Contrast injection is recommended in the lateral view to identify venous spread. Accumulation of contrast can be seen in the vena cava as a thin line interior and parallel to the vertebrae. Most larger veins are located at the interior neural foramen (disc) area. If venous spread is present, redirect the blunt needle and verify there is no vascular (venous) spread. If there is no spread, continue with injection of choice.

\*Please refer to current literature for volumes and medications used for injections.

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