

Ultrasound facilitated Neuraxial Anaesthesia

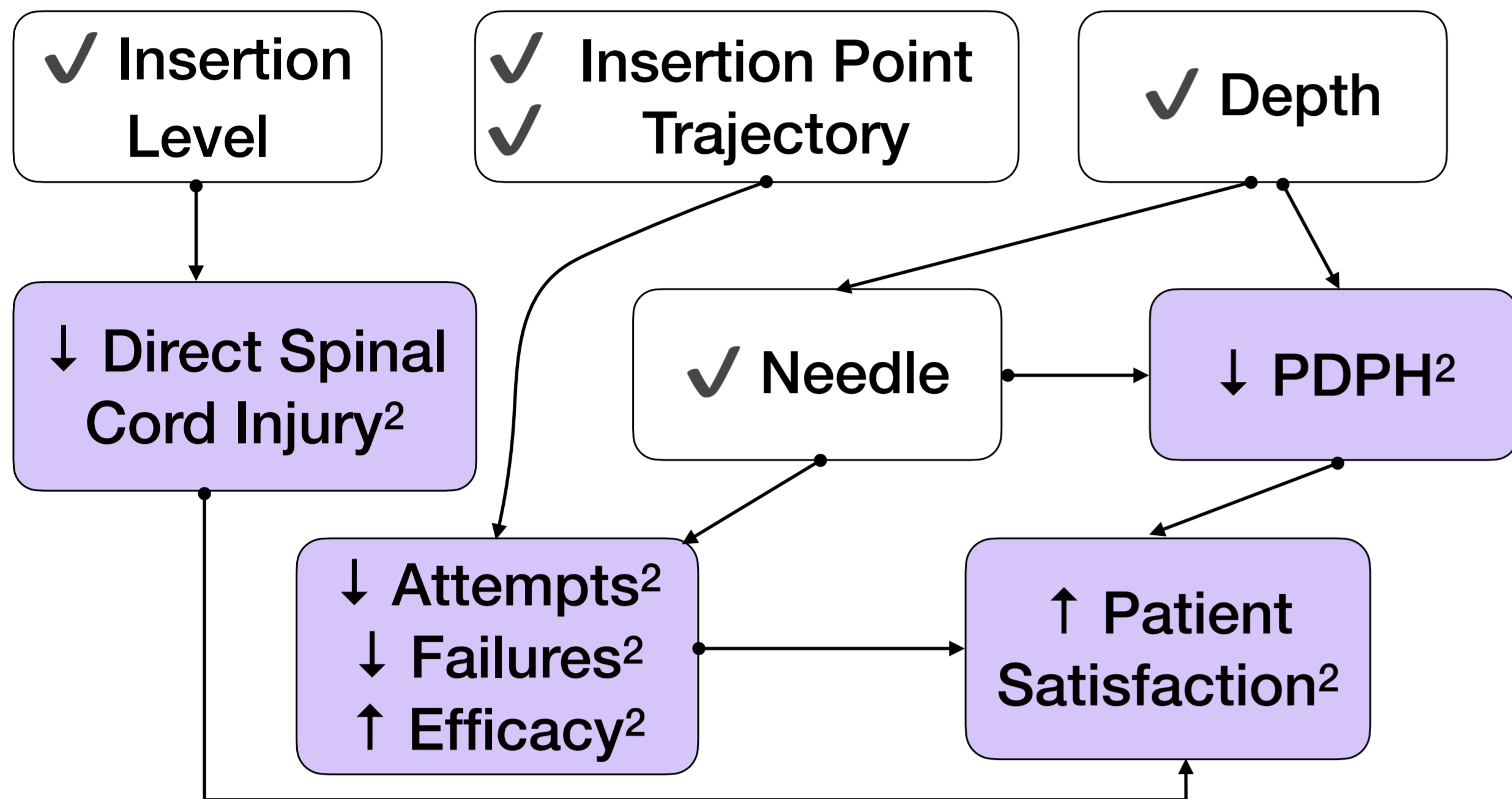
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WHY TO USE IT?

Recommended by NICE¹

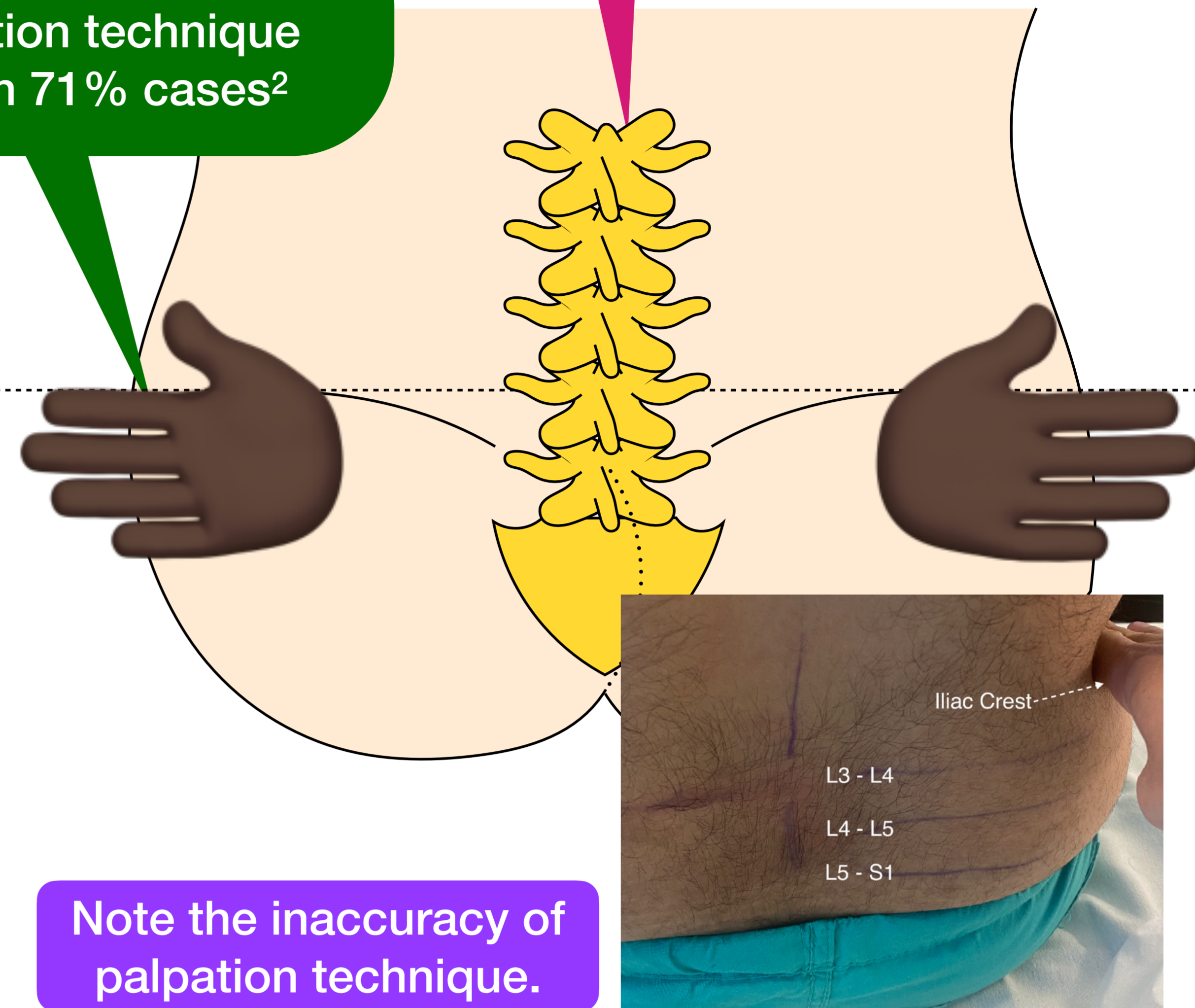
Non-invasive & Safe

Difficult anatomy

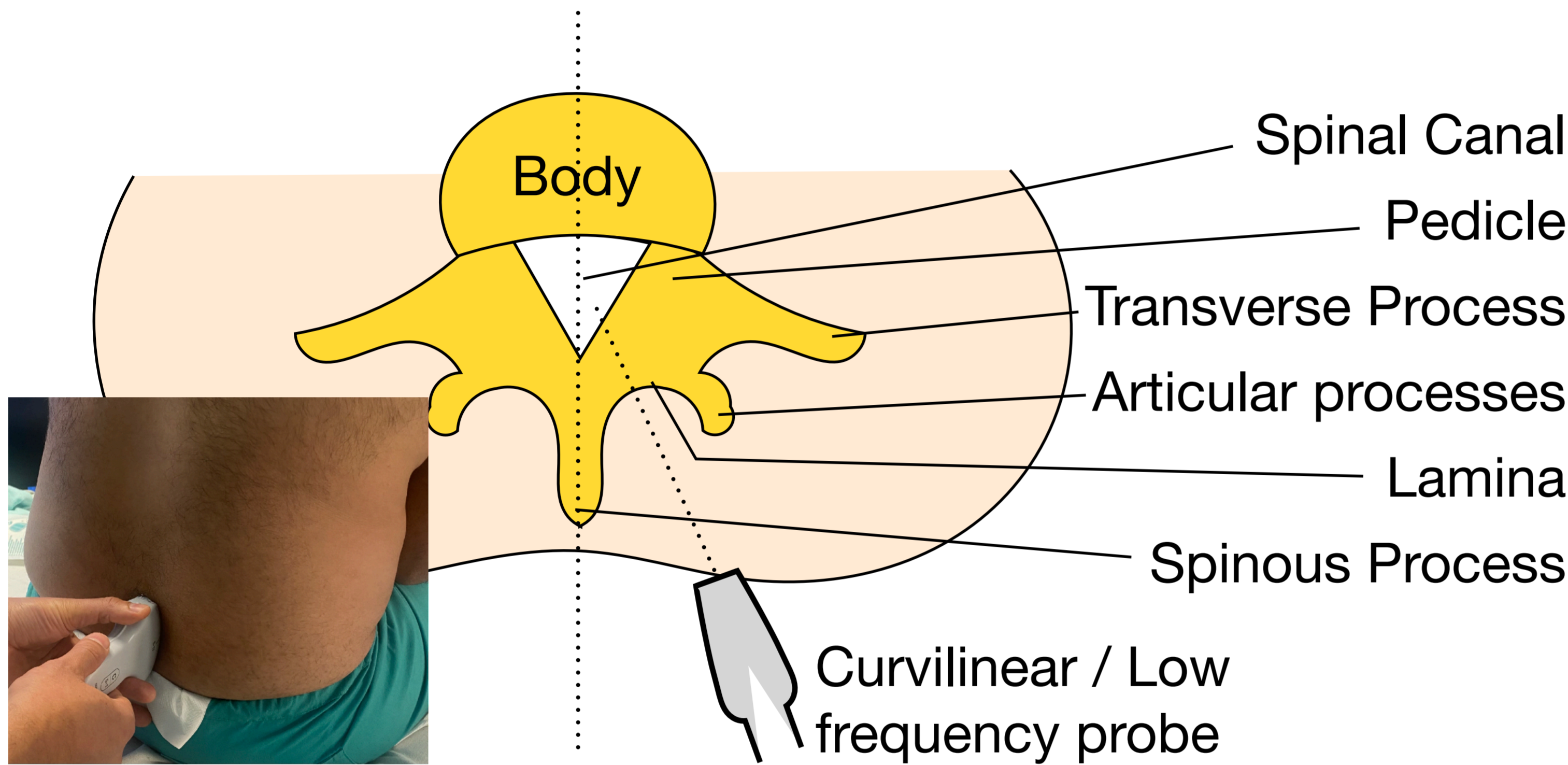


Myth - Spinal cord ends at L1
Fact - It ends below L1 in 28-58% cases²

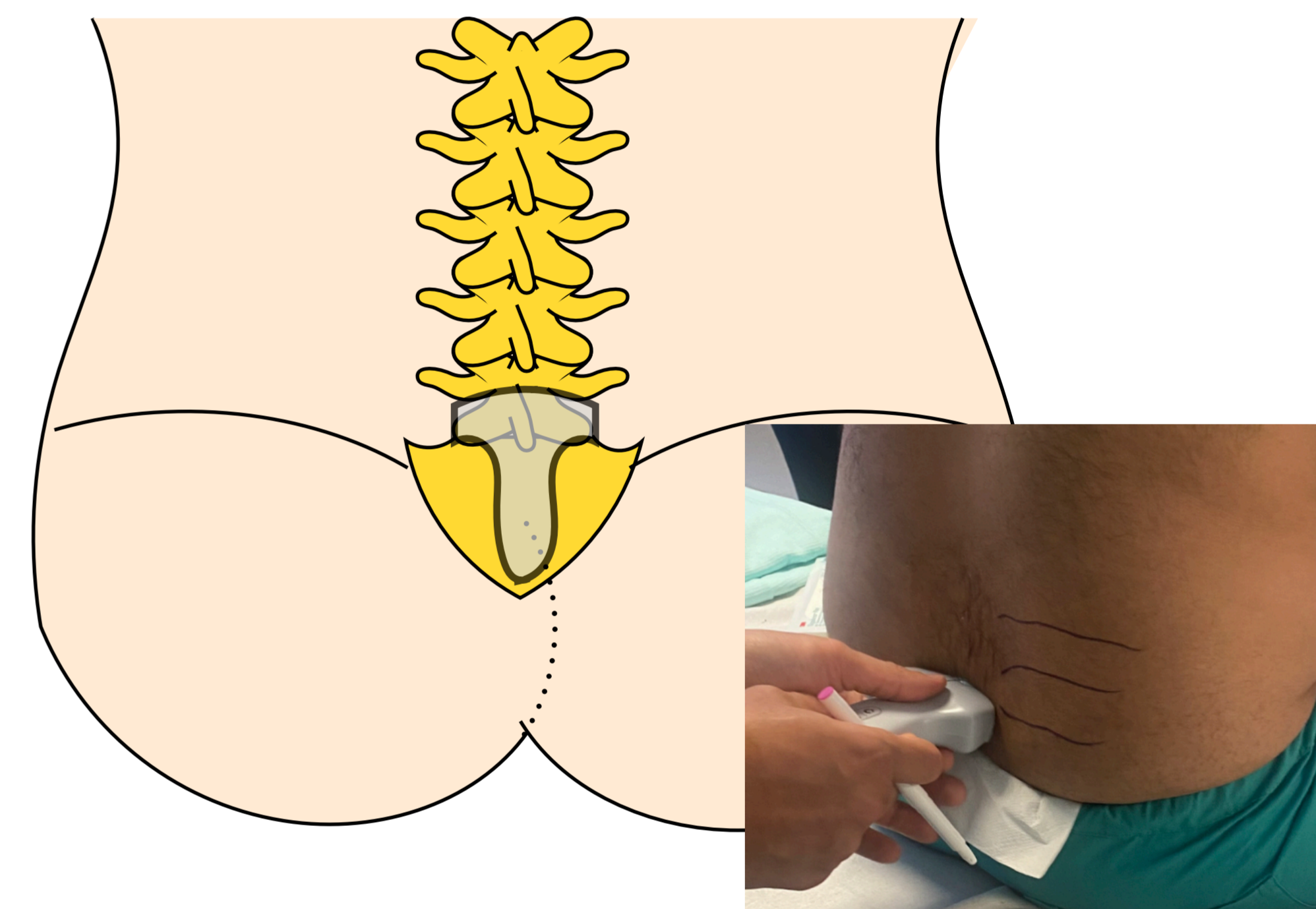
Myth - Palpation is accurate
Fact - Palpation technique inaccurate in 71% cases²



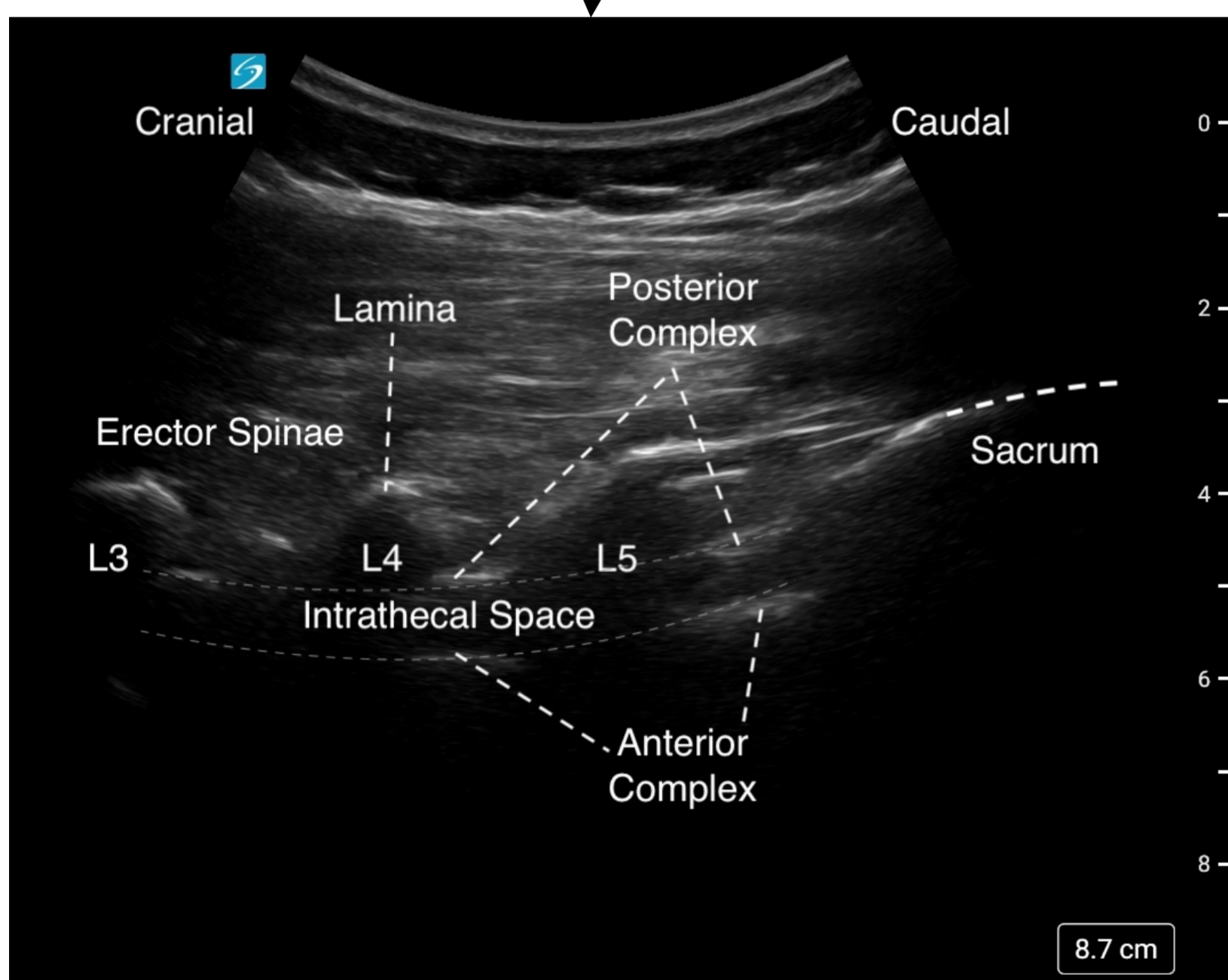
HOW TO DO IT?



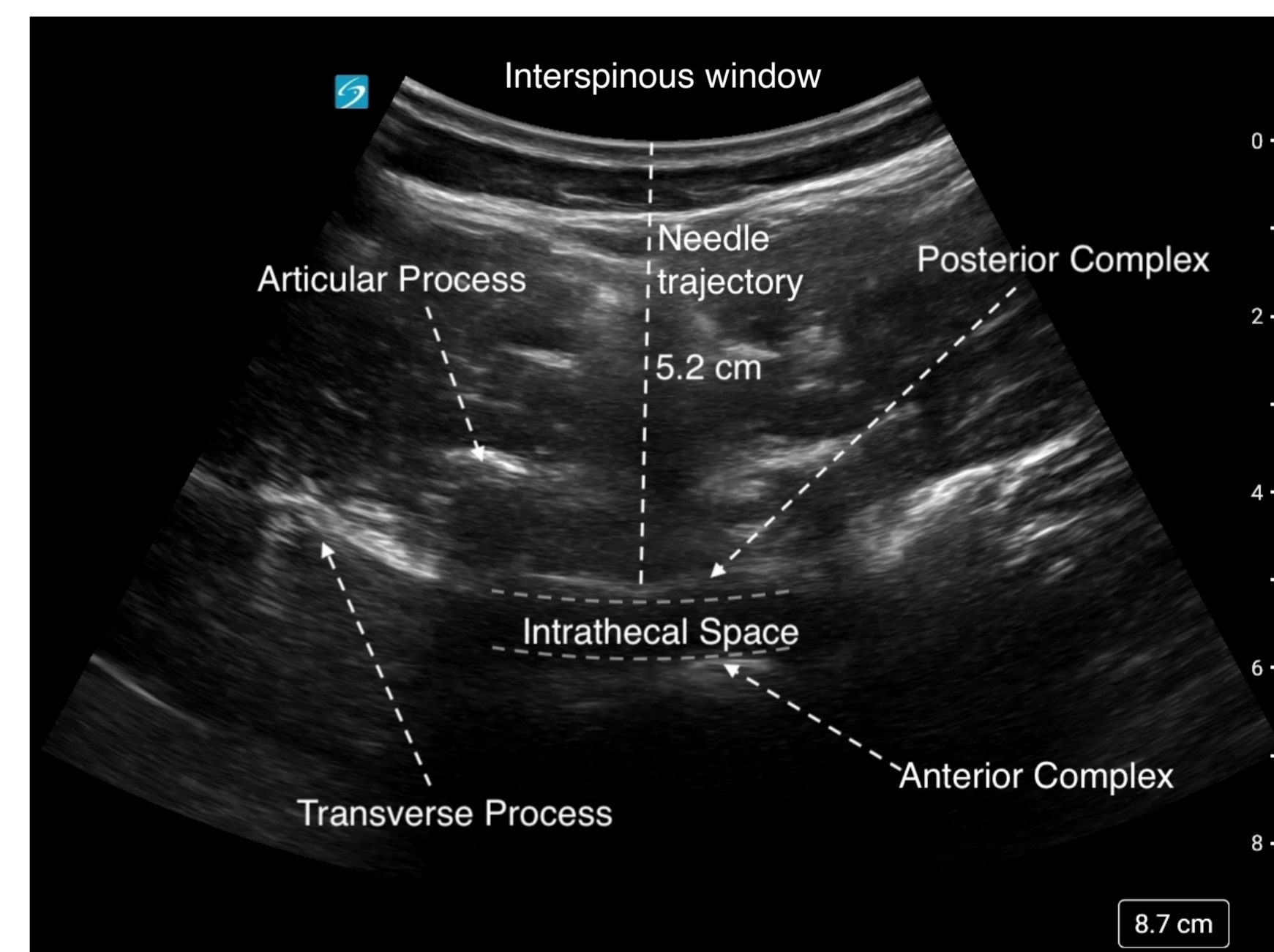
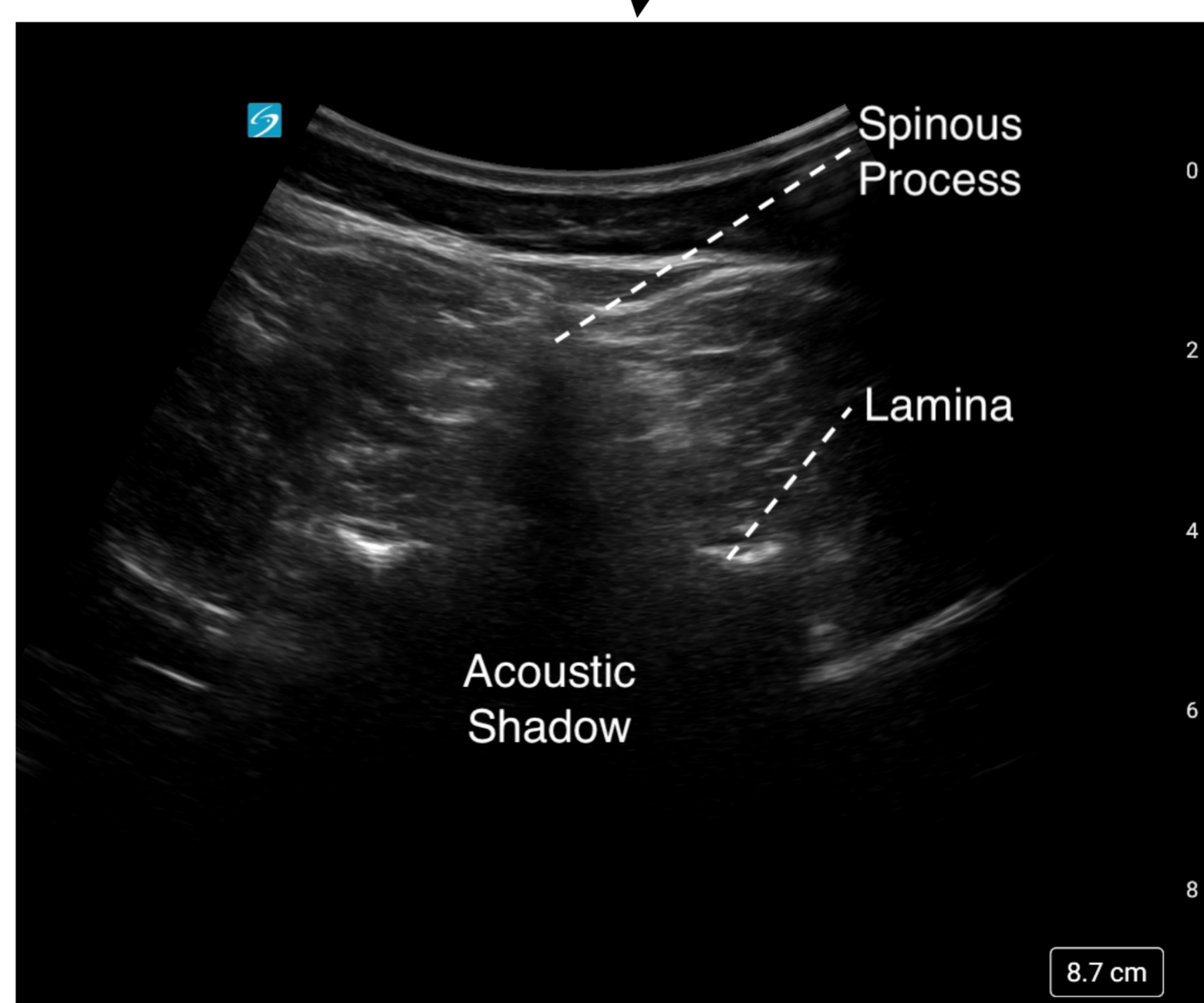
PARA-SAGITTAL OBLIQUE VIEW



TRANSVERSE VIEW



Identify levels scanning vertically
Identify best space



Identify midline, trajectory & depth

Expert tips:

- It is crucial to identify midline correctly
- It is important to gain experience before attempting it on patients with difficult anatomy
- Increasing gain can help identify the Anterior and Posterior Complex
- Use articular and transverse processes as a surrogate guide if the anterior and posterior complexes are not clear.
- Do not palpate landmarks after ultrasound use to avoid confusion
- Release the pressure on the probe while measuring depth

References:

1. National Institute for Clinical Excellence. Ultrasound guided catheterization of the epidural space: understanding NICE guidance. 2008. Available from: <https://www.nice.org.uk/guidance/ipg249>.
2. Sadeghi A, Patel R, & Carvalho JCA. Ultrasound-facilitated neuraxial anaesthesia in obstetrics. BJA Education Volume 21, Number 10, 2021.