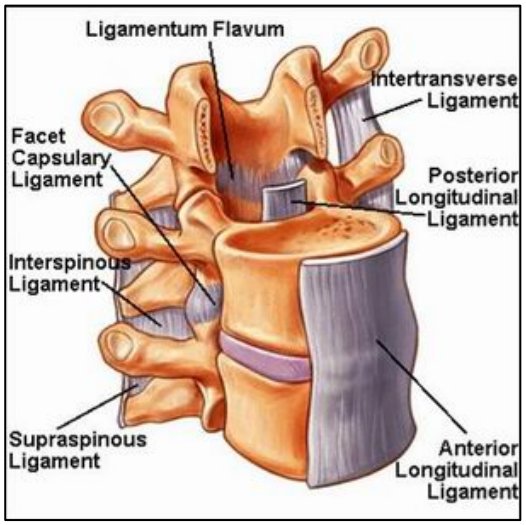
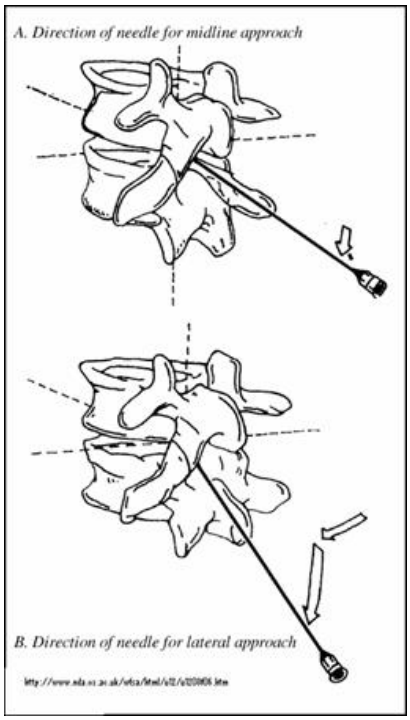
Subarachnoid Blocks

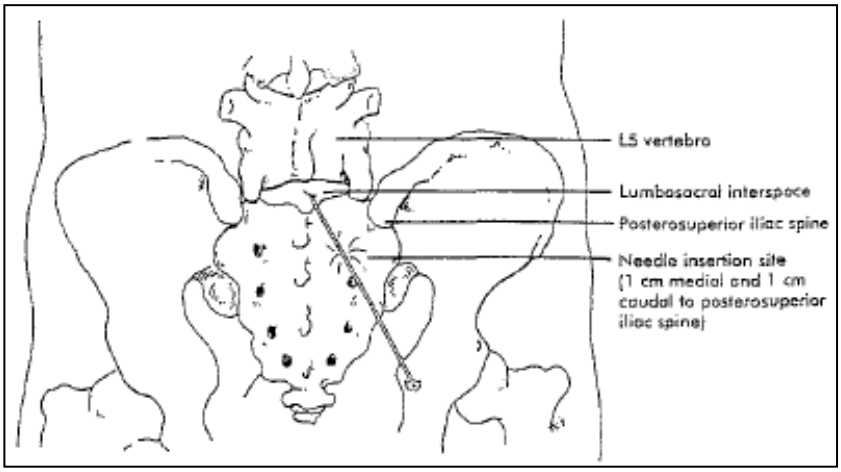
Anesthetic Pearls: Classic Approaches for Subarachnoid Blocks

1. **Median** (Midline) Approach – The needle is placed midline between two spinous processes at the desired level. The patient is encouraged to flex the spine to open the distance between the lamina and spinous process. The needle will pass through the supraspinous, intraspinous, and ligamentum flavum before puncturing the dura. If you encounter bone (usually spinous process), you can redirect the needle by pulling back to the skin and redirecting appropriately.



2. **Paramedian** (Lateral) Approach – Indicated in patients who cannot adequately flex because of pain or whose ligaments are ossified. The spinal needle is placed ~1.5 cm lateral to the spinous interspace with the needle is aimed medially and slightly cephalad. The needle passes lateral to the supraspinous and intraspinous ligaments. If the lamina is contacted, the needle is redirected and "walked off" in a medial and cephalad direction. The window that you are aiming for is bigger because the spinous processes are not in the way and because of the angle of the approach.



3. **Taylor** or **Lumbosacral** Approach – This approach is useful in patients with calcified or fusion of higher intervertebral spaces. The injection site is 1 cm medial and 1 cm caudad of the posterior superior iliac spine. The needle is directed 45 degrees medial and 45 degrees caudad. After contacting the lamina, the needle is walked upward and medially to enter the L5-S1 interspace (theoretically the largest interspace in the spinal column).

<u>Key Point</u>: The location where the needle punctures through the dura should be the <u>same</u> for each of these techniques.