FAQ: Epidural and spinal anesthesia guidance with Accuro®

Is Accuro intended to replace my palpation or loss of resistance skills?

No. It is intended to augment, and not replace your existing skills. Palpate first, then use Accuro to make the fine adjustments to locate exact spinal midline and evaluate the interlaminar space location and approximate depth. Use your loss of resistance techniques as normal.

How long will it take me to become proficient using Accuro?

The learning curve is expected to take between 5 and 10 procedures. Initial device usage should occur with healthy subjects with normal BMI.

Why is Accuro used with the sterile cover and Accuro Locator™ kit?

The Locator is a patented, single-use needle guide used with Accuro to accurately mark the needle insertion site along the skin surface or perform real-time needle guidance. Sterile technique with Accuro is required for optimal performance because it shortens the time between needle insertion site identification and needle advancement. Sterile technique is a requirement in the operating room or if re-scanning after initial needle placement is desired. (The sterile cover and Locator are sold separately.)

Should I expect Accuro's automated depth estimate to exactly match the depth of my needle when loss of resistance is first detected?

Accuro's automated depth estimate (orange number) uses detection of the articular process bone surfaces to measure the distance from the skin surface to the epidural space. Deviations of 1.5 cm or more between Accuro's automated depth estimate and actual needle depth can occur due to effects of skin compression during imaging. Skin compression will shorten the skin-to-epidural distance when using Accuro compared to when the needle is advanced. To optimize results, minimize skin compression while imaging with Accuro.

Are there any helpful techniques when scanning very low BMI patients?

Spinous process bones can protrude from the skin surface in very low BMI patients and make it challenging to maintain coupling of the Accuro probe to the skin. In these cases, use less compression and apply more ultrasound gel. The ultrasound will image through the gel and into the patient while avoiding direct contact with the spinous process protrusions.

How do you hold Accuro if your patient is positioned lateral decubitus?

Raise the patient's bed and/or use Accuro while seated to ensure that the Accuro display screen is near eye level. In the Accuro settings menu, select the screen orientation icon, then toggle: rotate right or rotate left depending.

What can I do to make the automated graphics more stable and/or not lag?

Because the spinal anatomy has very fine features, even very small adjustments in the angle and position of Accuro can lead to large changes in the image and automated graphics. In addition, if scanning too quickly over large scan areas, the graphics may appear delayed.

For best results, use slow "micro-movements" when scanning with Accuro. Ensure a stable hand grip by holding Accuro near the transducer probe end with the same hand anchored to the patient. Use two hands if necessary.

What should I do if I cannot find an orange interlaminar space overlay?

If no orange interlaminar space overlay is found using the lumbar presetting, then the interlaminar space is not easily accessible with a midline approach. Inaccessibility on midline often occurs in the thoracic spine and can be caused by spinal stenosis, osseous growths, or calcifications of surrounding ligaments.

In these instances, identification of the interlaminar space may be attempted again after repositioning the patient or moving to a different level. Alternatively, a paramedical approach may be attempted using the thoracic presetting, which identifies a prescribed paramedian needle path based on the Accuro Locator needle guide.

How many saved images can Accuro store? Accuro has maximum storage capacities of 10,000 images, 300 videos, and 999 exams.

What is the maximum depth that Accuro can image?

Maximum imaging depth for Accuro is 12.5 cm.

Are there any training resources I can access before using Accuro?

Yes, visit rivannamedical.com/accuro-resources/ for training videos and support material.

