

Changing Regional Anesthesia Experience: Integration of Procedural Anatomy Course

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Context:

In 2005, a regional anesthesia rotation was created in our residency program to increase hands-on experience of anesthesia residents with a wider variety of regional blocks.

Need:

Prior to 2005, UMC graduating anesthesiology residents participated in approximately 40 non-spinal/non-epidural regional anesthesia cases over their entire training. Comfort level with different regional techniques was low. It was apparent that the perioperative setting was not conducive to “bedside” teaching of basic anatomical and technical details.

Action:

As an intervention, a procedural anatomy course was introduced with seven topics addressing the major regional (upperlimb, lower limb, spine, abdomen, head/neck) and procedural (airways, central lines/mediastinum) topics relevant to anesthesiology. Two cadavers, procured by the Mississippi Willed Body Donation Program, were prosected for this purpose. A dedicated course is co-taught by an anatomist and the attending anesthesiologists overseeing regional anesthesia or pain clinic each month. Participants are residents on the regional anesthesia and pain clinic rotations and M4 medical students on their anesthesia rotation. The course is supported by web-based learning units.

Impact:

Regional anesthesia case numbers are on the rise; each resident attends 30-40 regional cases per month on their regional and pain clinic rotations. In IRB-approved opinion surveys, 80% of trainees indicated improvement in identifying anatomical landmarks. 83% of the anesthesiology faculty and 57% of the trainees acknowledged the positive contribution of the procedural anatomy course to their ability to perform regional anesthesia.