33 Old Dog, New Tricks: Implementing Regional Anesthesia in the Emergency Department

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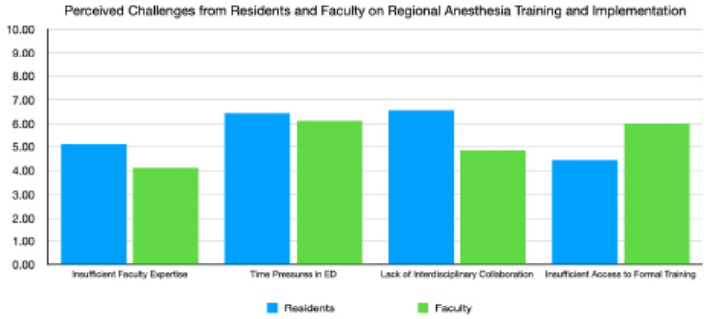
Introduction/Background: With new changes to the EM boards and ACEP guidelines, regional anesthesia has fallen into the realm of EM. While a foundation already exists with training in other ultrasound-guided procedures, the ability to teach and perform regional anesthesia is often dependent on opportunities, perceived knowledge and comfort with the procedure, and even faculty engagement. Following hands-on sessions with both faculty and residents, surveys were completed regarding barriers to teaching and implementing regional anesthesia in the ED to further enhance and prepare residents for future practice and their certifying exam.

Educational Objectives: To explore the integration of regional anesthesia into EM practice, with a focus on how the changes to the EM boards and ACEP guidelines have shifted regional anesthesia's role in the ED. To assess the current barriers to teaching and performing regional anesthesia in the ED and propose strategies for overcoming them. To prepare residents for the certifying exam by ensuring they are equipped with the knowledge, skills, and confidence to perform regional anesthesia safely and effectively in the ED.

Curricular Design: At a Level 1 trauma center university hospital, nineteen EM attending physicians performed a simulation involving setup and performance of fascia iliaca compartment block (FICB). Separately, twelve EM resident physicians performed a simulation involving setup and performance of FICB, serratus anterior block, interscalene block, and upper extremity nerve blocks. Surveys were obtained, using a 10-point Likert scale, prior to and upon completion of both simulations to measure prior experience, comfort, and perceived barriers to learning and implementing regional anesthesia in the ED.

Impact/Effectiveness: Following the simulation, residents and physicians alike responded positively to the educational experience. This was the second simulation hosted for residents and first simulation specifically for faculty in hopes to increase education across both groups and in turn, increase comfort and clinical use of regional anesthesia. Now with formal tracking of regional anesthesia as a procedure, there has been a significant increase in the use of regional anesthesia noted.

Figure 1: Bar graph highlighting the comparison between residents and faculty perspectives on challenges in developing training curriculum and implementing the use of regional anesthesia in the emergency department



34 Turning the Audience into the Action: A Novel Large-Group Simulation Approach for Conference-Based Resident Education

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Introduction/Background: Emergency medicine resident conferences often rely on passive lectures, although active learning improves engagement and retention. Simulation supports experiential learning but is typically limited to small groups, requires high-fidelity equipment, or occurs away from conference spaces, reducing scalability. Programs need an interactive, low-cost simulation method that engages large groups during routine conferences.

Educational Objectives: Objectives were to create a large-group simulation suitable for a lecture setting and evaluate learner satisfaction, engagement, comfort, and self-reported knowledge before and after the session compared with standard small-group simulation.

Curricular Design: A 30-minute in-person simulation was delivered during resident conference to 46 emergency medicine residents. A faculty member portrayed a patient with nausea, vomiting, prolonged QT interval, and torsades de pointes, later replaced by a low-fidelity CPR manikin once arrest occurred. Vital signs and case elements were shown on a large monitor. One to two volunteers managed the patient on stage, while the audience used live polling to guide scenario progression at preset decision points involving history, examination, diagnostics, medications, interventions, and consultations. Majority responses determined the next step, with slides showing outcomes. When torsades occurred, volunteers placed defibrillator pads and demonstrated charging a monitor. A facilitator led a structured debrief. Learners completed an anonymous survey comparing this format with traditional simulation.

Impact/Effectiveness: Forty-six residents participated. Learners reported higher engagement (4.6 vs 3.8) and comfort (4.5 vs 3.9) with the large-group format than with standard simulation. Self-rated knowledge improved from 3.1 before the session to 4.4 after. Satisfaction was higher (4.8 vs 4.6), and all participants (100%) endorsed wanting more large-group simulations. Qualitative feedback described increased attention, interactivity, and discussion. This low-cost, scalable model fits conference spaces, requires minimal equipment, and is adaptable to many emergency medicine topics. Future