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High-Fidelity Cadaveric Simulation Model for Lateral Canthotomy and Cantholysis

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Authors

Bleau, Alexander

Campoli, Jennifer

Wojcik, Susan

et al.

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for supervising APPs (31.6% vs 35.9%). PGY-1s reported lower confidence across all domains (Fig. 2). Confidence did not differ by anticipated post-graduation practice setting.

Conclusion: EM residents report overall confidence in teaching and supervising junior learners, which increases with experience. However, confidence is notably lower for APP supervision. Further research should explore strategies to optimize early educator development and improve confidence in supervising APPs.

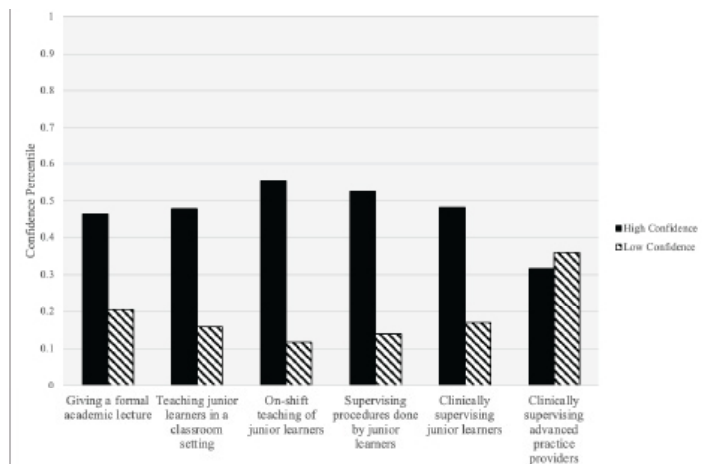


Figure 1. Percent confidence of residents (N=791) as medical educators and supervisors. Confidence is broken down by high confidence (extremely-quite confident) versus low confidence (slightly-not at all confident).

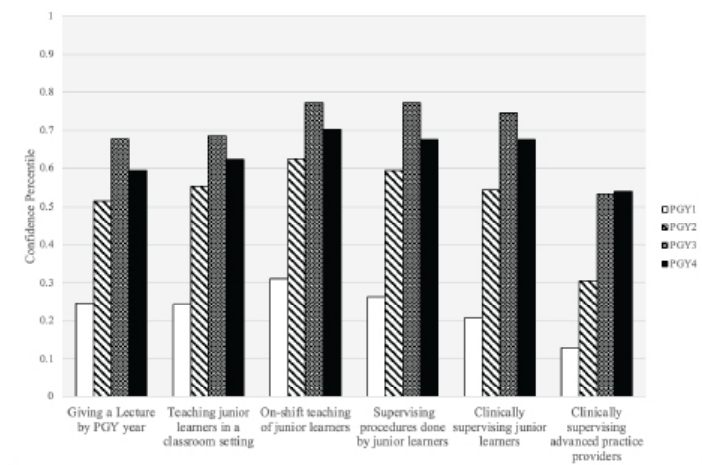


Figure 2. Percent high confidence (extremely-quite confident) of residents as medical educators and supervisors by PGY year (PGY-1 N=292, PGY-2 N=239, PGY-3 N=223, PGY-4 N=37).

70 High-Fidelity Cadaveric Simulation Model for Lateral Canthotomy and Cantholysis

Alexander Bleau, Jennifer Campoli, Susan Wojcik, Conor Young, Kayla Dueland-Kuhn

Background: Lateral canthotomy and cantholysis (LCC)

is a vision-saving emergency procedure used to treat orbital compartment syndrome (OCS), often caused by retrobulbar hematoma. Despite its importance, many EM trainees lack confidence in performing LCC due to the rarity of clinical exposure and limitations in existing simulation models.

Objective: To evaluate a cadaveric model that simulates retrobulbar hematoma for lateral canthotomy education in EM trainees.

Methods: Using a technique adapted from Chin et al. (2020, Int Forum Allergy Rhinol.), proptosis was simulated in fresh-frozen cadavers. This prospective observational study used pre- and post-intervention Likert scale surveys to evaluate EM residents' LCC procedural confidence and perceptions during annual procedure labs (2022-2023) at a single academic center. Survey data was analyzed with descriptive statistics and independent statistical testing. Outcomes included prior procedural experience, self-reported procedural confidence, and perceived model fidelity.

Results: 29 participants completed the pre-intervention survey and 25 completed the post-intervention survey. Most participants were PGY-3 residents (66%), with 55% reporting having never performed the procedure. The mean confidence among participants increased from 2.79 ± 1.42 to 4.32 ± 0.99 with a mean difference of 1.53 ± 0.34 , $p < 0.001$, 95%CI 0.85-2.21. The average rated fidelity of the model without OCS simulation was 2.76 ± 1.05 and the model with OCS simulation was 4.21 ± 0.76 with a mean difference of 1.44 ± 1.12 , $p < 0.001$, 95%CI 0.977-1.90.

Conclusion: To our knowledge, this is the first study to evaluate the educational impact of a cadaver-based simulation model incorporating a simulated retrobulbar hematoma for EM residents performing LCC. By providing both anatomic realism and pathophysiologic fidelity, this model uniquely improves learner confidence and reinforces the value of realistic simulation for high-stakes procedures like LCC.

71 Individualized Learning Plans for Senior Medical Students Pursuing Emergency Medicine Residency

Laryssa Patti, Amanda Esposito, Daniel Polvino, Mary Rometti

Background: Individualized learning plans (ILPs) identify learner strengths and weaknesses, and develop personalized action plans with faculty input. In 2024-5, we piloted ILPs for students enrolled in the emergency medicine (EM) TTR course. Students completed an individualized self-assessment (ISA), then developed an ILP with EM faculty. We surveyed senior medical students completing the EM TTR course regarding effectiveness and perception of ILPs.

Objectives: We hypothesize the use of ILPs for MS4s can guide their study plans and areas of improvement at the start