Comparison of Cricothyrotomy Educational Techniques: Self-Directed Learning (SDL) vs In-Person (IP) Instruction

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- Resources of time and clinical faculty expertise have been more constrained during the COVID-19 pandemic.
- Faculty are doing more with less, having to devote more time and effort to patient care and dealing with the stressors of an upheaval of a healthcare system.
- Training medical students and residents adequately within these constraints has also been more challenging.
- The purpose of this study is to compare IP faculty-guided instruction to video-guided SDL in the performance of a simulated cricothyrotomy.
- Our goal is to determine if SDL can achieve a level of mastery learning with training of a procedural skill.



 A randomized study was conducted evaluating instructional strategies for training of a cricothyrotomy procedure.

Methods

- Study participants were first and second-year medical students.
- The study compared the outcomes of IP instruction to a video-based SDL.
- Study outcome measures are skill scores completed by independent assessors.





Results

P-value indicates those who trained using SDL scored significantly lower overall than those who received IP instruction.
The 95% confidence interval's overlap suggests this may not be a meaningful difference





- Data demonstrates that SDL can achieve a level of mastery learning and results in more consistent results.
- Data shows that SDL can get learners to a level where in-person (IP) learning can be optimized.