

## Discoveries of Distinction

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### Running on EMPTY? Accuracy in Evaluating Gastric Ultrasound Images Before and After Brief Training

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Ultrasound evaluation (UE) of gastric contents may represent an excellent quantitative diagnostic tool.

Research has determined the use of gastric UE beneficial in determining gastric content. The study was a quasi-experimental design using a convenience sample. Pre- and post-tests were administered in an interrupted time series with repeated applications to the pre-residency 2017 nurse anesthesia master's cohort. Pre-test participants identified the gastric volume in the 8 sets of images with only chance accuracy; average score of 3.08/8 correct identifications (IDs). Pre-test, most students expressed no confidence in their image IDs. Post-test students attained an average score of 5.03/8 correct IDs. The post-test mean score was greater than the pretest score [ $t(109) = 15.84; P < 0.001$ ]. Although students' confidence increased more than their accuracy, confidence levels did not approach certainty.

Recognition of gastric content patterns by entry-level anesthesia residents might imply that this teaching technique is viable to introduce into practice at any level of anesthesia expertise. The study found that nurse anesthesia students are capable of correct identification of empty, normal and full gastric content ultrasound scans, following a brief presentation. ■

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## A Content and Thematic Analysis of Closed Claims Resulting in Death

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Using content and thematic analysis, closed malpractice claims where the outcome was death were reviewed by the AANA Foundation Closed Claims Research Team. The purpose of the study was to establish themes that would provide unique insights into the events leading up to death with a focus on the role anesthesia may or may not have had in the outcome. The researchers evaluated 245 closed claims from the CNA Insurance Companies spanning from 2003-2012. An adverse event leading to death occurred in 87 of the claims. Major events leading to death were categorized as respiratory, cardiac and drug related. The major themes contributing to events leading to death include patient, provider, environmental and team/group factors. The analysis of these claims exposed important and previously unappreciated aspects of adverse outcomes in cases involving CRNAs. The key lessons learned include: 1) effective communication is vital to patient safety 2) not all patients are suitable for surgery in

remote or office-based locations, and 3) difficult airways can be encountered at any point during the perioperative period. ■

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