

CA-3 Resident Assessment by Objective Structured Clinical Examination (OSCE) at 30 Months Training

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Learner Audience: Program Directors

Background: Residency Program Directors must certify that graduates "demonstrate sufficient professional ability to perform independently the entire scope of anesthesiology practice." This study reports the results of a CA-3 Objective Structured Clinical Examination (OSCE) designed to assess competence at 30 months training utilizing a rare, catastrophic perioperative event.

Hypothesis: Objective Structured Clinical Examinations may be used to assess potential graduate's readiness to practice without direct supervision.

Method Designs: Seven participants, 6 CA-3 and 1 Recertification and Retraining Fellow were assessed using an OSCE utilizing both a High Fidelity Patient Simulator (METI-HPS) and a standardized family member. Participants were blinded to the topic and format. Station 1 (HPS) required performance of a pre-operative patient assessment, informed consent, and to induce and maintain anesthesia on a healthy patient having a laparoscopic cholecystectomy. Physiologic changes consistent with Malignant Hyperthermia (MH) were presented to the examinee with time zero defined as protocol initiation. Symptom severity was accelerated in 1 minute intervals, reaching plateau at 5 minutes. Resident responses were timed as to 1) Calling for help, 2) MH Identification, 3) Requesting dantrolene, 4) Requesting coolant therapies. Station 2 was a simulated ABA Part II Examination administered by a faculty in the ABA Junior Board Examiner process. In Station 3 participants were instructed to speak to a standardized patient acting as the wife. Station 3 was scored on a 1-10 scale (1-Unsatisfactory, 5-Average, 10-Exceptional) in 2 separate grids. The first grid contained a check list for each of 4 key components of family communication: 1) Personal Introduction, 2) Specifying Patient Condition, 3) Identification of the Problem, and 4) Family Counseling. In the second, performance was subjectively rated in 5 of the 6 ACGME Core Clinical Competencies including Patient Care (PC), Medical Knowledge (MK), Professionalism (Prof), Interpersonal and Communication Skills (ICS), and Systems Based Practice (SBP). Total possible score was 90. Two chairs were provided, one for the wife and the second across the room.

Results: All 7 participants completed the study. In Station 1, average time to recognition of critical events were as follows: 4.1 min to request help, 4.5 minutes to recognize MH, 4.7 min to request dantrolene, and 4.8 minutes to request thermal therapy. All participants recognized the need for help but 1 failed to make the diagnosis of MH. All participants passed Station 2 based upon ABA Part II Examination Criteria. Average scores in Station 3 ranged from 57% to 87%. Five of 7 residents moved a chair within proximity to the wife while 2 spoke from a standing position.

Conclusion: While 1 participant failed to recognize MH, all residents recognized the seriousness of the patient's condition and demonstrated adequate PC and judgment to request assistance. All participants demonstrated adequate MK in Station 2 and adequate ICS, Prof, and SBP in Station 3. Despite several omissions, the participants demonstrated the necessary judgment and ACGME Core Clinical Competencies to practice without direct supervision.