Title: Assessment of Learning Curves and Competence Acquisition in Endoscopic Retrograde Cholangiopancreatography

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Abstract

Background: Training in endoscopic retrograde cholangiopancreatography (ERCP) requires technical, cognitive, and integrative skills well beyond those needed for standard endoscopic procedures. Recent studies have highlighted that overall procedural numbers alone are not adequate to confer competency. ERCP learning curves and competence acquisition by trainees are poorly defined. There is a general awareness that procedural competence certification should be based on objective performance criteria. **Aim:** Prospectively assess ERCP learning curves and competence acquisition by trainees during 1 year. **Methods:** Invite Portuguese Medical Centers with trainees learning ERCP to use our ERCP Competence Form to assess technical and cognitive competence in a continuous fashion. Trainees assessed should be starting their fellowship in ERCP. They will be graded on every ERCP by trainers and by themselves (one form for each). The form should be completed immediately after the procedure. **Expected results:** Analyze the learning curve for supervised ERCP. Technical (intubation, achieving the short position, identification of the papilla, cannulation of desired duct, sphincterotomy, stone removal and stent placement) and cognitive aspects (clear demonstration of indication of the procedure, appropriate use of fluoroscopy and logical plan based on cholangiogram/pancreatogram findings) will be evaluated, as well as immediate and postprocedure adverse events. **Discussion:** All gastroenterologists should strive to implement quality measurement into their practice. At present, there are no universally accepted standards for competence assessment. An assessment of individual performance is probably more robust than the use of minimum “threshold” numbers. Ideally, the trainee’s logbook should specify particular skills completed (cannulation, sphincterotomy, stent placement, tissue sampling) and indicate both the degree of difficulty of the attempted procedure and the number of cases completed without assistance. This ERCP competency assessment tool may allow the differentiation of learning curve progression from premature plateauing of skills.