

# Saudi Gastroenterology Association Position Statement on Privilege and Credentialing for Performing Endoscopic Retrograde Cholangiopancreatography In Saudi Arabia

The Saudi Gastroenterology Association (SGA) is issuing this position statement to address concerns related to the observed variability on the qualifications and competencies of endoscopists allowed to perform endoscopic retrograde cholangiopancreatographies (ERCPs) at Saudi health care institutions and as a guide for privileging and credentialing committees at these health care institutions.

ERCP is an advanced endoscopic procedure that requires considerable training and experience to perform effectively and safely.<sup>[1]</sup> It is the most sophisticated procedure performed by gastrointestinal endoscopists, with a morbidity and mortality of 5%–10% and 0.1%–1%, respectively.<sup>[2]</sup>

### Levels of Difficulty with ERCP

With the current advances in endoscopic technology and the advanced and complex interventions that have replaced the need for complicated surgical interventions, ERCP can now be classified into basic and advanced ERCP based on the nature of the disease being managed and the underlying anatomy. In a single-center study, Schutz and Abbot developed a grading scale for ERCP based on difficulty.<sup>[3]</sup> A modification of this score was adopted by the ASGE as part of their quality assessment document<sup>[4]</sup> and is further modified here as shown in Table 1.

### Competency in Basic and Advanced ERCP

Technical competence in ERCP must be acquired in association with the cognitive aspects of pancreaticobiliary diseases. In addition, the endoscopist should have a thorough knowledge of the anatomy and physiology of the pancreas and the biliary tree, including common variants in anatomy. The endoscopist should also have a detailed understanding of indications; contraindications; complications; and issues of informed consent, patient education, sedation, antibiotic prophylaxis, and anticoagulation management.

The importance of proper patient selection must be emphasized, because this will lead to the avoidance of marginally indicated procedures, especially in higher-risk patients, by using alternative imaging techniques, for example, magnetic resonance cholangiopancreatography or alternative, less invasive endoscopic procedures, for example, endoscopic ultrasound.

In 1996, the US gastroenterology core curriculum stated that fellows were required to complete 100 ERCP procedures, 25 of which were to be therapeutic cases, before competency assessment.<sup>[5]</sup> Subsequently, the American Society for Gastrointestinal Endoscopy (ASGE) ERCP core curriculum revised the threshold number required to achieve competency to 200 cases.<sup>[6]</sup> This was in view of the publications that showed that fellows could only achieve overall competency in ERCP after 180–200 cases.<sup>[7]</sup> However, the level of difficulty of cannulation of a native papilla is clearly higher than that. This was illustrated by a study that showed that successful deep cannulation of a native papilla was consistently achieved only after 350 cases.<sup>[8]</sup>

To achieve competency in levels II and III ERCPs, the endoscopist should ideally undergo further training in a recognized advanced endoscopy and ERCP training center in order to have adequate exposure in both the number and complexity of cases.

### Monitoring Quality in ERCP

The effectiveness of ERCP depends on both high success and low complication rates. Competency in ERCP can improve the effectiveness of ERCP; a constructive process of continuous quality improvement that educates endoscopists in optimal ERCP techniques to reduce complications could improve patient outcomes. Thus, continuous quality improvement is an integral part of an ERCP program.

Parameters to be assessed during quality control audit can be classified into three components: (1) Preprocedural; (2) Intraprocedural; and (3) Postprocedural. Preprocedural considerations include documentation of an appropriate indication, obtaining of informed consent, appropriate assessment of procedural difficulty, and appropriate use of prophylactic antibiotics. Intraprocedural factors include

Access this article online	
<b>Quick Response Code:</b> 	<b>Website:</b> <a href="http://www.saudijgastro.com">www.saudijgastro.com</a>
	<b>DOI:</b> 10.4103/1319-3767.145312

**Table 1: ERCP degree of difficulty**

Grades	Diagnostic	Therapeutic
1	Selective deep cannulation, diagnostic sampling	Biliary sphincterotomy, stones <10 mm in size, stricture dilation, stent and nasobiliary drain insertion for extrahepatic strictures or bile leaks
2	Billroth II cholangiograms, pancreatograms, and minor papilla cannulation	Stones >10 mm in size, stricture dilation, stent and nasobiliary drain insertion for hilar tumors or benign intrahepatic strictures
3	Manometry, post-Whipple anatomy, Roux-en-Y anatomy, cholangioscopy and pancreatoscopy	Billroth II therapeutic interventions, intrahepatic stones, pancreatic therapies, precut for selective cannulation

ERCP: Endoscopic retrograde cholangiopancreatography

success rate of deep cannulation, rate of the desired duct, and technical success rate of common bile duct stones extraction and biliary stent placement. Post-procedural factors to be monitored consist of procedure-related complications.

Health care institutions that grant privileges for ERCP should be encouraged to develop endoscopic reporting mechanisms and databases so that endoscopists may explicitly monitor the quality of their practice and effect improvements if they identify deficiencies, thus maintaining procedural competency and optimizing clinical care over long term.<sup>[9]</sup>

### Granting of Clinical Privileges

The granting of privileges is the responsibility of each health care institution and should be based on uniform standards applied to all practitioners applying for similar privileges, in all settings where endoscopy is performed. A decision to grant ERCP privileges should be based on formal training and on the recommendation of the applicant's endoscopic instructor verifying proficiency in the cognitive, diagnostic, and therapeutic aspects of ERCP. Proctoring by another qualified member of the medical staff may be helpful in assuring proficiency in the performance of ERCP prior to a decision to grant or continue privileges for the applicant.

### SGA Position Statement

- ERCPs should only be performed by consultants with formal, mentored training
- It is the responsibility of the local health care institute to grant privileges to perform ERCPs, the process of credentialing, and privilege for ERCP should be separated from the process for other endoscopic procedures, for example, esophagogastroduodenoscopy and colonoscopy
- The endoscopist's performance of ERCPs should be monitored to maintain procedural competence and to optimize clinical care

- Grade 1 ERCPs can be performed at any health care institute with an equipped endoscopy unit and an endoscopist privileged to perform ERCPs
- Grade 2 and 3 ERCPs should only be performed at tertiary care centers where experienced endoscopists with adequate training to perform such complex procedures are available.

### ACKNOWLEDGMENT

We thank Dr. Ram Chuttani, Director of Endoscopy and Chief at the Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, for his revision and inputs in the production of this document.

Ahmad Alharbi<sup>1</sup>, Turki AlAmeel<sup>2</sup>,  
Abdulrahman Aljebreen<sup>3</sup>, Majid Almadi<sup>3,4</sup>

<sup>1</sup>Consultant Gastroenterologist, Department of Internal Medicine, King Faisal Specialist Hospital and Research Centre, Jeddah, <sup>2</sup>Consultant Gastroenterology, King Fahad Specialist Hospital-Dammam, <sup>3</sup>Department of Medicine, King Khalid University Hospital, King Saud University, Riyadh, Saudi Arabia, <sup>4</sup>Division of Gastroenterology, The McGill University Health Center, Montreal General Hospital, McGill University, Montreal, Canada  
E-mail: ahmedalharbi@kfsshr.edu.sa

### REFERENCES

1. Leung JW, Chung RS. Training in ERCP. *Gastrointest Endosc* 1992;38:517-8.
2. Freeman ML, Nelson DB, Sherman S, Haber GB, Herman ME, Dorsher PJ, *et al.* Complications of endoscopic biliary sphincterotomy. *N Engl J Med* 1996;335:909-18.
3. Schutz SM, Abbott RM. Grading ERCPs by degree of difficulty: A new concept to produce more meaningful outcome data. *Gastrointest Endosc* 2000;51:535-9.
4. Baron TH, Petersen BT, Mergener K, Chak A, Cohen J, Deal SE, *et al.* Quality indicators for endoscopic retrograde cholangiopancreatography. *Gastrointest Endosc* 2006;63(4 Suppl):S29-34.
5. Training the gastroenterologist of the future: The gastroenterology core curriculum. The Gastroenterology Leadership Council. *Gastroenterology* 1996;110:1266-300.
6. Chutkan RK, Ahmad AS, Cohen J, Cruz-Correa MR, Desilets DJ, Dominitz JA, *et al.* ERCP core curriculum. *Gastrointest Endosc* 2006;63:361-76.
7. Jowell PS, Baillie J, Branch MS, Affronti J, Browning CL, Bute BP. Quantitative assessment of procedural competence. A prospective study of training in endoscopic retrograde cholangiopancreatography. *Ann Intern Med* 1996;125:983-9.
8. Verma D, Gostout CJ, Petersen BT, Levy MJ, Baron TH, Adler DG. Establishing a true assessment of endoscopic competence in ERCP during training and beyond: A single-operator learning curve for deep biliary cannulation in patients with native papillary anatomy. *Gastrointest Endosc* 2007;65:394-400.
9. Cotton PB, Hawes RH, Barkun A, Ginsberg GG, Amman S, Cohen J, *et al.* Excellence in endoscopy: Toward practical metrics. *Gastrointest Endosc* 2006;63:286-91.