Alternative Pathways to Training in Gastrointestinal Endoscopy

Physicians who have not received conventional formal training in gastrointestinal endoscopy may wish to acquire privileges to perform endoscopy. The conventional route for acquiring skills in endoscopy is via a two or three year gastroenterology fellowship or five to six year surgery residency. The following recommendations have been developed by the ASGE Committee on Training for individuals who have not completed one of the conventional routes for acquiring endoscopic skills and who wish to acquire competency adequate to obtain endoscopic privileges. These guidelines are intended to ensure the quality, cost-effectiveness and safety of patient care, and to help protect health care providers from legal liability resulting from granting privileges to inadequately trained physicians who wish to perform endoscopy. These guidelines are based on the principle that universal standards of endoscopic training should apply to all physicians regardless of their specialty background or training.

Competency in performing endoscopic procedures requires competency in the technical, interpretive and cognitive aspects of endoscopy, and the capability to integrate endoscopic findings into clinical practice. The six principles of endoscopic training, as previously outlined by ASGE[1], include understanding of indications, expeditious performance of procedures, correct interpretation of findings, integration of these findings into therapeutic management plans, avoidance and management of complications, and recognition of personal limitations in performing endoscopic procedures. The training period should be long enough to allow substantial experience in endoscopy but not so prolonged that newly acquired skills are lost. Training should be comprehensive and provide a working knowledge of the pathophysiology, diagnosis, and management of digestive diseases for which endoscopic procedures are indicated.

Guidelines for formal training in endoscopy established by the ASGE include performance under supervision of at least 100 upper endoscopies or colonoscopies to acquire competency in either procedure. These recommended numbers are twice those proposed by the American College of Physicians (50 each)[2,3]. The following available data support the more conservative guidelines of the ASGE:

1. Formally trained and experienced colonoscopists consistently achieve a cecal intubation rate of over 95% [4,5];
2. after 100 supervised colonoscopies, the cecal intubation rate of trainees is only 84%, and learning curves are similar regardless of subspecialty background training[6];
3. family physicians with limited training report cecal intubation rates varying from 54% to 83%[7,8]. For upper endoscopy, experienced endoscopists approach 100% success with esophageal and pyloric intubation [6], whereas family practitioners report that the pylorus be traversed in 93% of cases[9].

Performance of an arbitrary number of procedures does not guarantee competency. Training in endoscopy must include recognition of lesions and proper interpretation of findings, understanding of gastrointestinal disease pathophysiology, and development of appropriate clinical management strategies. Endoscopists performing diagnostic procedures such as colonoscopies must be capable of performing appropriate therapeutics such as polypectomy at the same setting. Short (two or three day) courses or self-instruction in endoscopy without additional supervised experience do not provide adequate training in these or other aspects of endoscopy.

Inadequate endoscopic examinations may result not only from failure to insert the endoscope completely, but also from failure to recognize pathology, formulation of inappropriate

management strategies, or failure to accomplish necessary therapeutic interventions such as polypectomy at the time of the diagnostic study. The implications of such examinations include missed diagnoses, the need for endoscopy to be repeated, or the need for alternative procedures such as barium enema. Such outcomes are neither desirable nor cost-effective.

It is recommended that physicians desiring training in endoscopic procedures other than flexible sigmoidoscopy, regardless of specialty, receive formal, supervised, "hands on" training in endoscopy. This may take the form of a preceptorship, sabbatical, or education in a practice setting by a qualified endoscopic instructor. This type of formal training is most readily available in a timely fashion in gastroenterology fellowships or surgical residencies[11]. Training in endoscopy must occur in the context of cognitive education in lesion recognition and gastrointestinal disease pathophysiology. Endoscopic training should conform with ASGE guidelines[1], and should include performance under supervision of the minimal numbers of procedures currently recommended by the ASGE, including 100 diagnostic upper endoscopies and 100 total colonoscopies. Proficiency in one procedure (such as flexible sigmoidoscopy or upper endoscopy) does not imply proficiency in another (such as colonoscopy), because of differences in anatomy, pathology, and technique. Training in colonoscopy must include polypectomy. Additionally, endoscopists must receive training in the techniques of conscious sedation. Competency in performing elective procedures does not imply competency in performing emergency therapeutic procedures.

As espoused previously by the ASGE[12], it is recommended that health care facilities grant endoscopic privileges only to physicians who have training and experience that meet the recommended criteria. Prior to being granted privileges, an endoscopist should demonstrate competency by undergoing proctoring by an impartial qualified endoscopist. It is also suggested that prior to undergoing endoscopic procedures, patients have access to information regarding the level of training of the endoscopist.

These guidelines for training are based on the available data in the literature that pertain to the attainment of competency in endoscopy. Organizations that disagree with these recommendations should provide objective data to support their positions. Assurance of adequate training has implications with respect to both quality and legal liability.

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