American Society For Gastrointestinal Endoscopy

Endoscopy by Non-Physicians

GUIDELINES for Clinical Application

Guidelines for the practice of endoscopy are developed by the American Society for Gastrointestinal Endoscopy using an evidence based methodology. A literature search is performed to identify relevant studies on the topic. Each study is then reviewed for both methodology and results. Controlled clinical trials are emphasized, but information is also obtained from other study designs and clinical reports. In the absence of data expert opinion is considered. When appropriate, the guidelines are submitted to other professional organizations for review and endorsement. As new information becomes available revision of these guidelines may be necessary.

These guidelines are intended to apply equally to all who perform gastrointestinal endoscopic procedures, regardless of specialty or location of the service. Practice guidelines are meant to address general issues of endoscopic practice. By their nature they cannot encompass all clinical situations. They must be applied in the appropriate context for an individual patient. Clinical considerations may justify a course of action at variance to these recommendations.

ENDOSCOPY BY NON-PHYSICIANS

Purpose

Gastrointestinal endoscopy is defined as the visualization of the digestive tract with flexible or rigid diagnostic tools. Endoscopic technology has advanced rapidly over the past thirty years, becoming an integral part of clinical gastroenterology. The ASGE has continually promoted safe and responsible endoscopic practice. Guidelines have been developed and disseminated regarding appropriate use of and training in endoscopy. Given the increasing demands for endoscopy, as well as the growing range of its diagnostic and therapeutic options, non-physician endoscopists have been trained to provide screening sigmoidoscopy, and in some cases, upper endoscopy and colonoscopy[17]. The purpose of this guideline is to address the issues surrounding endoscopic practice by non-physicians.

Definitions

Competent endoscopic practice requires thorough training in both the cognitive and technical aspects of endoscopy. Cognitive skills include knowledge of procedural indications/contrain-dications, risks, benefits and alternatives as well as accurate identification and interpretation of gross pathology[1]. It also includes the ability to assess the implications of information regarding the patient's condition and the capability to integrate endoscopic findings into clinical practice.

Technical skills refer to the ability to perform the physical aspects of endoscopy, such as insertion, advancement, maneuvering through the gastrointestinal tract, biopsy, therapeutic interventions and withdrawal of the instrument. Trained physician endoscopists include, but are not limited to, physicians with fellowship training in gastrointestinal disease and formal training in endoscopy as defined in prior ASGE publications[2]. Non-physician endoscopists are defined as any non-physician medical personnel performing endoscopy, including but not limited to, nurses, nurse practitioners, physician assistants, and medical assistants.

Discussion

The decision to utilize non-physician endoscopists should be made based upon competence in endoscopy. Additionally, factors to consider include availability of physician resources and volume of procedural demand as dictated by local conditions. Physician endoscopists undergo extensive formal training in gastrointestinal disease as well as endoscopic procedures. It is unreasonable to expect non-physicians to be trained to this extent. Because of this, non-physicians will not attain the

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cognitive expertise necessary for optimum patient care as is expected of a physician. In this light, non-physicians who have performed endoscopy have been trained and subsequently supervised by physician endoscopists.

At this time, the majority of non-physician endoscopists perform flexible sigmoidoscopy only. Flexible sigmoidoscopy requires fewer supervised examinations to attain objective measures of technical competency[3] than other endoscopic procedures, does not require sedation and has a low rate of endoscopically related complications. Non-physician endoscopists have been performing sigmoidoscopies since 1972[4] and there have been several studies supporting the safety and efficacy of flexible sigmoidoscopy by non-physicians[5-7]. A recent randomized controlled trial demonstrated no significant differences in depth of insertion or polyp detection between gastroenterologists and nurse endoscopists[8].

Screening flexible sigmoidoscopy is becoming a population-based screening tool for colorectal cancer, which is the third most commonly diagnosed cancer and the second leading cause of cancer related mortality in the United States. An estimated 131,000 new cases of colorectal cancer will be diagnosed and over 56,000 will die from it each year[9]. Retrospective (case-control) studies have demonstrated a 55-70% reduction in colorectal cancer related mortality with screening sigmoidoscopy[10-12]. Currently, less than 10% of the at risk U.S. population undergoes screening sigmoidoscopy, which is in part due to the lack of available skilled endoscopists[13]. By the year 2000, over 50 million individuals in the U.S. will be eligible for screening sigmoidoscopy[13]. The British Society of Gastroenterology and the Society of Gastroenterology Nurses and Assistants have written policy statements endorsing the practice of flexible sigmoidoscopy by registered nurses[14,15]. Currently, 34% of state boards of nursing do not approve this practice, but allow flexible sigmoidoscopy by nurse practitioners[16].

Non-physician endoscopists also perform upper endoscopy and colonoscopy[16]. The prevalence of this practice is unknown at this time. However, the non-physician's ability to administer sedation, perform endoscopic therapy and evaluate for and treat complications has not been done. The performance of these procedures demands intensive training as well as supervision during procedures by a physician endoscopist. The thresholds for determination of endoscopic competence should be equal to that expected of a physician trainee. It is unclear at this time whether patient needs and demand for endoscopy merit non-physicians performing procedures other than screening flexible sigmoidoscopy. All endoscopy by both physicians and non-physicians should be subjected to a quality monitoring program as discussed in the ASGE guideline[17].

RECOMMENDATIONS

The delivery of health care in gastroenterology has been expanding at a rapid pace. This phenomenon has begun to modify the traditional roles of non-physician medical personnel. These individuals have increasingly performed the role of non-physician endoscopists.

At this time, the medical literature supports the utilization of non-physician endoscopists for screening flexible sigmoidoscopy only. Performance of flexible sigmoidoscopy for symptom assessment by non-physicians has not been studied. The less demanding requirements for training, the absence of sedative use and the need for large scale screening further support this practice. It is recommended that a trained physician endoscopist be available for immediate assistance and confirmation of findings.

Certification of non-physician endoscopists should remain within the limits of state licensure as well as institutional policy. This guideline is not meant to substitute for local determination of practice and policy.

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