

Preprocedural Assessment for Sedation in Gastrointestinal Endoscopy



John E. Tetzlaff, MD*, Walter G. Maurer, MD

KEYWORDS

- The “anesthesia approach to preparation”
- The risk of complications
- Sedation
- Hypoxemia
- Aspiration
- Cardiac disease
- Pulmonary disease
- Difficult airway

KEY POINTS

- Identification of the procedure planned.
- Define the goals for sedation for the planned procedure.
- Identify the comorbidity of the patients.
- Recognize the potential complications of sedation for endoscopic procedures.

INTRODUCTION

The role of the anesthesia service in sedation for gastrointestinal endoscopy (GIE) has been steadily increasing.^{1,2} The goals of preprocedural assessment for GIE are determined by the specific details of the procedure, the issues related to the illness that requires the endoscopy, comorbidities, the goals for sedation, and the risk of complications from the sedation and the endoscopic procedure. Rather than consider these issues as separate entities, they should be considered as part of a continuum of preparation for GIE. This is told from the perspective of an anesthesiologist who regularly participates in the full range of sedation for the full spectrum of GIE.

THE ANESTHESIA APPROACH TO PREPARATION FOR A PROCEDURE

Because any anesthesia case can evolve in complexity, preparation focuses on the needs for the most complex. The starting point is a traditional history and physical (H&P) examination, with all additional interventions driven by the results.³ The age and weight are the context, but do not dictate any specific testing. The present illness dictates further preparation, when there are interventions that delineate diminished

Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, Department of General Anesthesia, Cleveland Clinic, 9500 Euclid Avenue, Cleveland, Ohio 44195, USA

* Corresponding author.

E-mail address: Tetzlaj@ccf.org

Gastrointest Endoscopy Clin N Am 26 (2016) 433–441

<http://dx.doi.org/10.1016/j.giec.2016.02.001>

giendo.theclinics.com

1052-5157/16\$ – see front matter © 2016 Elsevier Inc. All rights reserved.

functional capacity, or by virtue of events, such as hemorrhage.⁴ The comorbidities are identified in the context of how the disease influences functional reserves of major organs. The physical examination is targeted to the heart, lungs, central nervous system, and gastrointestinal (GI) tract with special attention to the airway. The penultimate element of preparation is the use of all of these elements to create a plan for the anesthetic intervention. For GIE, this would range from mild sedation to general anesthesia (GA). The plan requires realistic descriptions to the patient of the options for sedation and informed consent. For upper endoscopy, the invasiveness of upper endoscopy intubation requires either a cooperative or unconscious patient.⁵ This is a key element of the plan as well as consent.

CONTRAST BETWEEN THE ENDOSCOPY SUITE AND THE OPERATING ROOM

In the operating room (OR), the surgeon is the primary care physician (PCP) for the patient, and directly or indirectly responsible for all elements of preparation, even those delegated to the anesthesia team. In contrast, many endoscopy suites are often open units, and the endoscopist is rarely the PCP. In the absence of protocols, many elements of preparation can be variable in this setting.⁶ Even the basic H&P and preprocedural instructions may not occur without specific unit protocol. Preparation is limited to those measures that prepare the patient for endoscopy with little attention to preparation for an anesthetic intervention.⁷ On the other hand, the conditions during endoscopy are different from surgery, where immobility, total anesthesia, and complete analgesic are assumed. During endoscopy with conscious sedation, some movement is the rule rather than the exception, and the discussion of approaches to sedation reflects this set point for both the patient and the endoscopist. Also, procedural amnesia is not always required during some GIEs. Inadequate preparation by the referring PCP that necessitates cancelling the case requires education of the PCP as to the needs for proper preparation to facilitate safe sedation for GIE.

GASTROINTESTINAL ENDOSCOPY PROCEDURES

Most GEI procedures (GIEPs) are esophagogastroduodenoscopy (EGD) or colonoscopy for diagnoses of benign conditions or cancer screening for healthy, ambulatory patients. The sedation needs are limited and the preparation is mainly determined by the needs of the endoscopy procedure. Physical preparation of the patient is the responsibility of the PCP or the physician ordering the endoscopy. Laboratory testing is unusual and nothing by mouth (NPO) intervals are short, accommodating the needs of the intestinal preparation, especially for colonoscopy. When a GIEP requires deep sedation or GA, this level of preparation may be inadequate. Participation or direction by the anesthesia team may improve efficiency of the endoscopy suite.^{8,9}

With repeat procedures, the outcome of previous sedation can dictate the degree of preparation required. When the procedure is brief, the sedation minimal, and the patient satisfaction with the previous procedure high, minimal preparation is again reasonable. When the outcome is otherwise, deeper sedation may be necessary and more involved preparation and longer NPO intervals may be required. When the next procedure is more involved, such as endoscopic ultrasound (EUS) or endoscopic retrograde cholangiopancreatography (ERCP), the depth of sedation needed is deeper. The need for preparation is greater as is the need to inform the patient of the need for deeper sedation. If deep sedation or GA is required, the patient must be clearly informed of the correct NPO interval, especially if bowel preparation is required.

Download English Version:

<https://daneshyari.com/en/article/3310096>

Download Persian Version:

<https://daneshyari.com/article/3310096>

[Daneshyari.com](https://daneshyari.com)