ANESTHESIA FOR HUP ENDOSCOPY

Most inpatient endoscopies at the Hospital of the University of Pennsylvania are done in the Ravdin Operating Rooms. Please review the following information, so you have some idea what to expect, since things may be different from what you are used to for surgical cases. (Most outpatient endoscopies are done at the Perelman Center for Advanced Medicine; see the separate guide for that.)

In the preoperative evaluation of patients for endoscopy, pay particular attention to airway, aspiration risk, allergies, medical problems, medications or habits that promote tolerance to anesthesia drugs, and patient concerns. For cases where earlier anesthesia involvement is needed, the endoscopists should have requested an anesthesia consult. It's a good idea to document when there is a medical indication for anesthesia, such as inability to sedate with conventional agents suggested by previous experience or due to pregnancy or chronic use of painkillers, anxiolytics, and/or ethanol; significant cardiovascular disease such as cardiomyopathy, angina, myocardial infarction, hypotension, pacemaker or defibrillator; significant respiratory disease, such as use of supplemental oxygen, sleep apnea, and/or morbid obesity; or significant mental retardation or dementia.

Ravdin Operating Rooms are now equipped with anesthesia machines and Pyxis machines, like other operating rooms. Most endoscopy cases are done with propofol infusion and spontaneous ventilation via natural (or, sometimes for upper endoscopy, nasal) airway. Many of the medications we use are potent respiratory depressants, though, so monitoring exhaled CO₂ is important for patient safety.

Before induction, make sure the consent forms for the procedure and for anesthesia are complete. Unless you plan to place an endotracheal tube (e.g., in case of blood or food in the stomach, or vomiting), have the patient positioned (usually left lateral decubitus, except ERCP is often prone with the head turned to the side) and, for upper endoscopic procedures, have the gastroenterology team place the bite block, prior to induction.

The gastroenterologist may request glucagon for gastrointestinal relaxation. Glucagon is usually supplied as a vial with 1 mg powder and a vial with 1 mL solvent; the usual initial dose is between 0.2 and 0.5 mg IV. It may affect blood glucose, so use with caution in diabetics and/or patients with insulinoma.

The Ravdin Operating Rooms also have the Epic electronic anesthesia record system built in now. After endoscopy, regular patients should be taken to the PACU with a member of the GI team, where you should give a report to the PACU nurse as usual.

If you have any questions or comments about your experience in anesthesia for endoscopy at Penn, please let us know. We hope your experience here broadens your horizons by exposing you to a growing part of anesthesia practice.

Sincerely,

Jonathan W. Tanner, M.D., Ph.D., Assistant Professor of Clinical Anesthesiology and Critical Care 777 Dulles Building e-mail: tannerj@uphs.upenn.edu phone: 215 662 7053

Mark S. Weiss, M.D., Assistant Professor of Anesthesiology and Critical Care 680 Dulles Building e-mail: weissm@uphs.upenn.edu phone: 215 687 9069

Perelman School of Medicine, University of Pennsylvania