The Use of Diprivan (Propofol) in GI Procedures

Part 3 in a 3-part series

In the first part, which you can read here, we discussed the background of the debate surrounding the administering of Propofol by gastroenterologists (non-anesthesiologists) and anesthesiologists, as well as the controversy over the need for a warning label. In the second part, posted here, we addressed the involvement of CMS in the issue, the formation of a task force (consisting of gastroenterologists and hepatologists) to analyze existing literature on the topic and the various conflicting/overlapping guidelines that have been released.

The Current State of Affairs

On the national front, it appears GD-P is most prevalent in pockets of the country where there is either a shortage of anesthesiologists or in large tertiary academic organizations. In those settings, gastroenterologists perform a significant number of Propofol-administered procedures with the necessary emergency support systems in place, should problems arise. In fact, the published studies discussed in the ACG’s reports are from these very settings. So, it leaves to question whether there is enough data to support the assumption that similar findings, as reported in the ACG position papers, are also associated with GD-P use of Propofol in community medical centers or in physician office practices.

Within the state of New Jersey, an informal poll of ten of our insured hospital facilities revealed that Propofol is administered in the GI procedure areas, in all cases, by anesthesiologists and in one, by CRNAs under the direct supervision of an anesthesiologist.

Under the revised CMS guidelines, hospitals will be allowed latitude in specifying the qualifications of each category of practitioner who administers analgesia and their supervision requirements. Not unlike it has been in the past, the anesthesia department typically oversees the provision of anesthesia in all parts of the facility, regardless of whether it is administered by an anesthesiologist or not. So, this aspect of the CMS requirements is not new. What is different now, however, is that the level of sedation is assigned by the department of anesthesia. And, because the therapeutic window between the desired level of moderate sedation to deep sedation or even total anesthesia is so narrow, departments of anesthesia may very well assign Propofol to a MAC or general anesthesia category; thereby requiring that only anesthesiologists, or CRNAs, under the direct supervision of anesthesiologists, administer Propofol in the GI setting.

“To GD-P or not”

It appears that sound reasons for using GD-P exist, and in defense of such a position, there is GI literature and peer-reviewed studies that demonstrate safety and efficacy for GD-P. There are also “pro” GD-P practice guidelines and editorials written by individual experts and professional societies. However, following the lead of several anesthesiology organizations, plaintiff attorneys may contend that the gastroenterologists’ vested interest in GD-P skews these recommendations.

Regardless, the fact remains that gastroenterologists may be held liable for negligence for complications arising from the use and management of Propofol by not adhering to generally accepted standards of care; especially should anesthesia-administered Propofol be considered (if it isn’t already) the “de facto” standard to which physicians are held.

Therefore, an analysis for the pros and cons for GD-P ideally should include consideration of the following:

- Multidisciplinary support

  Studies, guidelines, and consensus statements supporting the safety of GD-P Propofol published over the signatures jointly of gastroenterologists and experts from other disciplines do exist. In addition, anesthesiologists have published general guidelines for safe use of Propofol. For their part, gastroenterologists have published protocols and offer instructional courses (some even co-taught by anesthesiologists) in safe and effective GD-P. And while the two specialties agree on most points, anesthesiologists still recommend that when using Propofol the administering physician should be trained in the administration of general anesthesia.


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• Adequate knowledge and training

Working together, anesthesiologists and gastroenterologists must clarify what "general anesthesia training" is necessary for GD-P, and what is not. Cooperatively they must devise programs to teach, maintain, and certify these skills—such a program must specify the details of the upper airway management training required to permit safe GD-P. Once established, GD-P skills can then be taught to gastroenterologists through didactic presentations and hands-on training in simulation labs or one-on-one preceptorships. The training period should involve a time commitment that is compatible with midcareer practice, much in the way that surgeons take midcareer training courses to learn new operative techniques.

GD-P training can be integrated into GI fellowships, as is already done at several US institutions. Such programs (which can be adapted on an institutional level to serve other subspecialties—such as cardiology—where non-anesthesiologist Propofol is also advantageous) certify and re-certify providers and include on-going quality assurance and carry weight in court.

According to the joint paper issued by the ACG, and an ASA statement on granting privileges for deep sedation to non-anesthesiologist sedation practitioners, training curriculum for individuals planning to administer Propofol should be comprised of didactic training, airway management, simulation training, and preceptorship. Following completion of a training program, individuals should undergo periodic retraining in an airway workshop and/or human simulation laboratory.

The didactic component of the training should incorporate a comprehensive overview of the pharmacological and dosing aspects of Propofol, discussion of the continuum of sedation and its implications related to the use of Propofol, as well as a review of pre-procedure, intra-procedure and post-procedure patient assessment requirements. Upon completion of the didactic session, individuals should be required to obtain a passing score on an examination designed to evaluate their knowledge and understanding of the concepts and principles taught.

Airway management, as the single most important emergency skill required of individuals involved with the administration of Propofol, requires training in the recognition and management of ventilator complications and specific airway skills. These skills include airway assessment, skill at restoring airway patency by using manual, oral or nasopharyngeal airway techniques, and bag-mask ventilation.

• Adherence to authoritative guidelines

Physicians engaging in GD-P must demonstrate appropriate training, facilities, equipment, staffing, patient selection, drug titration, quality assurance, adherence to institutional policies and privileging criteria, informed consent and pre and post-procedure monitoring.