Propofol-Based Sedation in Gastrointestinal Endoscopy: Getting Safer and Safer

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Deep sedation for endoscopic procedures has become an increasingly used option. However, because of impairment in patient response, this technique also bears an increased risk of adverse events. Sedation-associated complications in gastrointestinal endoscopy show incidences between 0.1 and 3.6% [1–3]. Sedation is therefore a substantial cause for complications in gastrointestinal endoscopy and has to be focused on critically by the gastroenterologists who perform sedation in gastrointestinal endoscopy as the ‘non-anaesthesiologist administration of propofol’ (NAAP) procedure. Many anaesthesiologists and also the ASA expressed their concerns ‘that individuals, who are not anaesthesia professionals, may not recognize that sedation and general anaesthesia are on continuum, and thus deliver levels of sedation that may in fact be general anaesthesia without having the training and the experience to respond appropriately’ [4]. Recently, 21 national societies of anaesthesiology in Europe signed a consensus statement confirming that propofol should be administered only by those trained in the administration of general anaesthesia [5]. The German Society of Anaesthesiology did not sign this paper. The German anaesthesiologists took part in the guideline conference of sedation in gastroenterological endoscopy [6]. One result of this guideline conference was the structured 3-day train-

ing course ‘Sedation and Emergency Management in Endoscopy for Endoscopy Nurses and Assisting Personnel’ for nurses to be able to perform the sedation supervised by the endoscopist. Several trials confirm that adequately trained nurses supervised by endoscopists are able to safely administer propofol sedation for endoscopy procedures [7–9]. In a recently published trial, we were able to demonstrate that these training courses for nurses improved structures in gastrointestinal endoscopy with respect to patient safety [10].

A recent analysis showed that the use of anaesthesia services for colonoscopy is associated with a somewhat higher frequency of complications, specifically, aspiration pneumonia [9].

NAAP for endoscopic procedures is safe when performed by personnel properly trained in airway handling and sedation with propofol. This could be proven by the analysis of a prospective complication registry of 388,404 gastrointestinal endoscopic procedures in the typical NAAP manner [11, 12]. In this context the study by Müller et al. [13] should be seen.

In a recent study [10], the safety and efficacy of routine insertion of a special soft nasopharyngeal airway tube in longer lasting upper and lower gastrointestinal endoscopy have been analysed. The authors could demonstrate

that this nasopharyngeal airway tube was able to significantly reduce the frequency of hypoxemia, and also hypotension was seen less often. This easy manoeuvre is effective and has only a minor risk for nasopharyngeal injury in patients without deviation of the nasal septum, without anticoagulants or non-steroidal anti-inflammatory drugs and not being ASA IV.

This study [10] shows that sedation in gastrointestinal endoscopy is becoming safer, even if the technique examined is only fitting in about two thirds of all patients who

underwent an endoscopic procedure. This study is a pilot study and the data have to be confirmed by multicentre trials. For planning these studies, we now know that we do not have to assume a high complication rate of this soft airway tube. Maybe more patients will participate than in this recent study.

A high percentage of gastroenterologists in Germany want to be responsible for sedation and perform NAAP, which is why we have to perform such studies!

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