Propofol Sedation for Colonoscopy in Middle Eastern Countries

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Colonoscopy is typically performed with sedation. Intravenous benzodiazepines with or without opioids have long been used to induce sedation for both colonoscopy and more complex endoscopic procedures. In recent years, we have observed a rapid transformation from the use of opioids and benzodiazepines to sedation with propofol in Western countries.¹ However, most endoscopy centers in the Middle East still use traditional sedation with opioids and benzodiazepines for endoscopy.

The safety, feasibility and effectiveness of propofol sedation for endoscopic procedures have been well studied in Western countries.²⁻⁶

In this issue of "Middle East Journal of Digestive Diseases", Ghadir MR and colleagues investigated the role of propofol to induce deep sedation in an endoscopy center in Iran.⁷

In this uncontrolled study, the authors induced sedation with propofol for colonoscopy in 125 patients. Of these, 5.6% developed hypoxemia during colonoscopy. All hypoxemia episodes were successfully controlled by administration of nasal oxygen without the need for mechanical ventilation.

This study provides evidence for the feasibility of propofol sedation in Middle Eastern countries. However, several issues merit consideration. Since this was an uncontrolled study, therefore the safety, feasibility and effectiveness of propofol sedation in Middle Eastern countries should be compared to conventional sedation with benzodiazepines and opioids.

Another limitation of this study was that the investigators mainly focused on the side effects of propofol. They did not evaluate the onset of action of propofol, recovery time, patient cooperation (as rated by the endoscopist) or patient satisfaction (as rated by the patient following the procedure).

Another point is that in the current study, propofol alone was used for induction of sedation. Previous studies have shown that the combination of propofol with benzodiazepines or opioids allows for a dose reduction of propofol. Some, but not all of these studies, have shown that the combination of propofol with other sedatives may shorten recovery time.^{1,8,9}

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In this study, propofol was administered by an anesthesiologist which significantly increases the cost of the procedure. There have been several studies from Western countries that demonstrate the feasibility of non-anesthesiologist administration of propofol for endoscopic procedures.¹⁰⁻¹² In Iran, future studies on the feasibility and safety of nurse-administered propofol for endoscopic procedures should be evaluated.

Experiences from the Western world have shown the superiority of propofol-based sedation compared to traditional sedation in terms of post-procedure patient satisfaction, time to sedation and recovery time.^{8,13-15}

Therefore, there is a need to expand the use of propofol for colonoscopy and more complex endoscopic procedures (i.e., EUS, ERCP) in Iranian endoscopy centers. Future studies should focus on the feasibility of nurse-administered propofol. Clearly, nurses need to take appropriate theoretical and practical training to become qualified to administer propofol.⁸

KEY WORDS

Propofol; Colonoscopy; Sedation; Middle East

CONFLICT OF INTEREST

The author declares no conflict of interest related to this work.

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