

Propofol-based deep sedation for small bowel enteroscopy procedure in sick patients in a developing country

Somchai Amornyotin
Mahidol University, Thailand

Background and Goal of study: Small bowel enteroscopy procedure is an invasive procedure for diagnosis and treatment in patients with abnormality of gastrointestinal tract especially for small bowel. It commonly performed with deep sedation. The efficacy and the complication rate by which a sick patient is sedated remains controversial. The aim of the study was to evaluate and compare the clinical efficacy of propofol based deep sedation (PBDS) for small bowel enteroscopy procedure in sick (American Society of Anesthesiologists [ASA] physical status III-IV) and nonsick (ASA physical status I-II) patients in a teaching hospital in Thailand.

Materials and Methods: We undertook a retrospective review of the anesthesia or sedation service records of adult patients who underwent small bowel enteroscopy procedures from June 2007 to December 2009. All patients were classified into two groups according to the ASA physical status. In group A, the patients had ASA physical status I-II, while in group B, the patients had ASA physical status III-IV. The primary outcome variable of the study was the successful completion of the procedure. The secondary outcome variables were sedation-related adverse events during and immediately after the procedure.

Results and Discussion: After matching age, gender, weight, duration and indication of procedure, there were 76 adult patients who underwent small bowel enteroscopy procedure by using PBDS during the study period. Of these, 43 patients were in group A and 33 patients were in group B. There were no significant differences in age, gender, weight, duration and indication of procedure, and the mean dose of fentanyl, propofol, and midazolam between the two groups. All patients in both groups successfully completed the procedure. Overall, respiratory and cardiovascular adverse events in both groups were not significantly different. All adverse events were easily treated, with no adverse sequelae.

Conclusion: In the setting of a developing country, PBDS for small bowel enteroscopy procedure in sick patients by trained anesthetic personnel with appropriate monitoring was safe and effective. The clinical efficacy of this technique in sick patients was not different or worse than in non-sick patients. Serious adverse events were rare in our population.

Biography

Somchai Amornyotin has completed his FRCAT from the Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand. He is the anesthesiologist staff of Siriraj GI Endoscopy Center and the Department of Anesthesiology, Faculty of Medicine Siriraj Hospital. He has published more than 50 papers in reputed journals and has been serving as an editorial board member and reviewer of several international journals such as World Journal of Gastrointestinal Endoscopy, Gastroenterology Insights, BMC Anesthesiology, Digestive Disease and Science, Journal of Gastroenterology and Hepatology Research, World Journal Gastroenterology, Clinical and Experimental Gastroenterology, European Journal of Gastroenterology and Hepatology, etc.

somchai.amo@mahidol.ac.th