

The Elderly Also Deserves to Undergo Therapeutic Endoscopy Safely under Sedation with Propofol by Gastroenterologists

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See "Safety of Gastroenterologist-Guided Sedation with Propofol for Upper Gastrointestinal Therapeutic Endoscopy in Elderly Patients Compared with Younger Patients" by Masaya Nonaka, et al. on page 38, Vol. 9. No. 1, 2015

As many therapeutic endoscopic procedures are invasive, time-consuming, and has the risk of complications, adequate sedation is mandatory for safe procedure. The methods of sedation are variable from weak sedation with small doses of narcotics to general anesthesia. For therapeutic endoscopic procedures, benzodiazepines or propofol with/without narcotics have been most commonly used for sedation.¹

Although propofol is short and rapid acting, and not associated with higher risk of complications compared with benzodiazepines, the complications such as respiratory and/or circulatory distress may be higher in the elderly who are more vulnerable to deep sedation.² And the sedation by gastroenterologists may have more complications by deep sedation than that by anesthesiologists because the gastroenterologists may not monitor the patients closely by the endoscopic procedure itself.

The adverse events during therapeutic endoscopic procedures under sedation with propofol by gastroenterologists were compared between the younger and the elderly group over age of 75 years.³ Propofol was administered continuously to maintain the sedation, and the level of sedation was determined using the Ramsay sedation score. In the results, circulatory distress during procedures was not significantly different between two groups in terms of hypotension, desaturation, and bradycardia. The complications were managed by temporary discontinuation of propofol, and there were no delayed awakening or re-sedation after recovery.

As the therapeutic endoscopies have been extended into more invasive procedures, adequate sedation has also been considered to be essential for safety as well as comfort of patients. Propofol has been increasingly used with the advantages of rapid action,

short recovery time and better satisfaction of patients. Also, the stability of awareness after recovery was shown to be satisfactory in terms of psychomotor and driving skills.⁴ Satisfaction, recovery and safety of propofol were not different between propofol maintenance and conventional sedation with midazolam and meperidine, and the recovery time was shorter with propofol than midazolam.^{5,6}

Complications can be encountered during sedation; desaturation, hypotension, and bradycardia are most common. The elderly may be more vulnerable than the younger to complications during sedation because of depressed cardiopulmonary function, decreased gag reflex, decreased drug metabolism or hidden underlying comorbidities. Also, the sedation by gastroenterologists may have the risk of more complications than anesthesiologists who can only concentrate on the sedation and manage the complications except the endoscopic procedures.

In this study, the complication rates of sedation with propofol were not different between the elderly and the younger, and were comparable with the previous results by anesthesiologists.^{3,7} As the rate of infusion and the cumulative doses were lower in the elderly than the younger, the deep sedation in which the complications might be higher could be avoided. Therefore, slower rate of infusion and small cumulative doses of propofol should be considered for safety of sedation in the elderly.

Most important issues during sedation are safety as well as comfort of patients. Propofol can be safely used for sedation in the elderly by gastroenterologists, but the safety can be achieved under close monitoring of patients and the management capacity for the complications.

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CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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