Selection of Sedatives for Elderly Patients with Dental Phobia Based on Our Experience of Two Cases

Kyouichi NARIHIRA, Mika SETO, Ryosuke KITA, Michitaka MATSUDA, Toshihiro KIKUTA

Department of Oral and Maxillofacial Surgery, Faculty of medicine, Fukuoka University

Abstract

The elderly tend to have a reduced reserve capacity for breathing and circulation and often have an associated medical history. Therefore, when selecting agents for intravenous sedation in these patients, it is necessary to consider these features and the surgical stresses of the drugs holistically. We herein report two cases of tooth extraction in elderly patients with dental phobia who were contraindicated for intravenous sedation.

The first patient, a 75-year-old man, was scheduled to have two teeth extracted. He underwent tooth extraction surgery under intravenous sedation combined with local anesthesia with midazolam and propofol. The intraoperative circulation dynamics were stable (Ramsay score: 4). Two years later, he underwent another tooth extraction of a single tooth in the left upper jaw under intravenous sedation with dexmedetomidine, and his OAAS (Observer’s Assessment of Alertness / Sedative Scales) was 4-5. During the second operation, the patient was unable to fall asleep, and he complained that the first operation had been more comfortable than the second one. The second patient, a 72-year-old man, had a history of post-angina and myocardial infarction after stent placement. At the first operation, he had two teeth extracted while under intravenous sedation with dexmedetomidine with no body motion, stable hemodynamics and an OAAS of 4-5. He had no complaints after surgery. He then underwent ordinary tooth extraction under intravenous sedation with local anesthesia using midazolam and propofol. He complained after surgery that he felt fears this time.

His Ramsay score was 4. Dexmedetomidine has been used for intravenous sedation during oral surgery because it has pharmacological actions of sedation, analgesia and anti-anxiety effects. Midazolam and propofol are both drugs that have only a pure sedative effect. With sedation by dexmedetomidine, adjustment is difficult with comparatively shallow sedation degree which can promote communication. It has also been suggested that dexmedetomidine is contributed to a stable depth of anesthesia was since it has also analgesic effect from this experience.

Treating these two patients has thus provided us with an opportunity to reacquaint ourselves with the difficulties of choosing drugs for intravenous sedation in patients with dental phobia.

Key words: The elderly, dental phobia, midazolam, dexmedetomidine