



Safety of etomidate administration for procedural sedation in elderly emergency department patients

Janusz Sokołowski^{1,2}, Kinga Niewińska^{1,2}, Przemysław Niewiński³,
Anna Wiela-Hojeńska³, Juliusz Jakubaszko^{1,2}

¹Department of Emergency Medicine, Wrocław Medical University, Bujwida 44a, PL 50-345 Wrocław, Poland

²Emergency Medicine Department, Lower Silesia Specialistic Hospital, Traugutta 116, PL 50-420 Wrocław, Poland

³Department of Clinical Pharmacology, Wrocław Medical University, Bujwida 44, PL 50-345 Wrocław, Poland

Correspondence: Przemysław Niewiński, e-mail: p.niewinski@gmail.com

Abstract:

The aim of this study was to assess the effectiveness, safety and frequency of adverse drug reactions of etomidate use as a procedural sedative agent in the Emergency Department (ED), for elderly patients (age >70 years).

We conducted an observational study of a series of 145 consecutive patients above 70 years who received etomidate for painful orthopedic procedures.

Deep sedation was induced in 65 patients, moderate sedation was observed in 80 patients. Full recovery was achieved on average after 25 min in patients treated with fentanyl and on average after 20 min in patients treated without fentanyl administration. Adverse cardio-respiratory events were documented in 7 patients (4.82%). Desaturation < 94% was noted in 6 patients, bag-valve-mask ventilation in 1 patient. There were no signs of circulatory depression. One patient experienced nausea, and we observed one episode of anxiety. Myoclonic tremors were observed in 32 patients (22%).

Etomidate is a relatively safe and sufficient pharmacotherapeutic agent for procedural sedation in elderly people with minor adverse reactions. Short recovery time, lack of hemodynamic instability at lower doses, low frequency of adverse drug reactions provide optimal and safe conditions for procedural sedation in ED for elderly people.

Key words:

etomidate, elderly, adverse drug reactions, emergency department
