



Sugammadex in pediatric patients

TO THE EDITOR: In South Korea, sugammadex has begun to be clinically used as an antagonist of nondepolarizing neuromuscular blockers since 2013 and is approved for use in pediatric patients above 2 years of age. There are many reports on the usefulness of sugammadex in pediatric patients. We read with great interest the paper titled “The use of sugammadex in an infant with prolonged neuromuscular blockade - A case report -” [1]. However, we have some concerns that we would like to discuss.

First, the authors administered neostigmine twice without anticholinergics. We assume that this was probably due to the atropine administered during the pre-induction period. However, concomitant administration of anticholinesterase and anticholinergics is not solely due to increases in the heart rate [2]. Second, the body temperature of the neuromuscular monitoring site should be well-maintained because hypothermia at the measurement site can interfere with mechanomyographic and acceleromyographic recordings. As an example, one study reported that the twitch tension of the adductor pollicis decreased by 16% per degree when the muscle temperature fell below 35.2°C [3].

Third, when the two post-tetanic counts were measured, sugammadex 25 mg (more than 4.6 mg/kg) was administered. Sugammadex is not approved for children under 2 years of age in South Korea or in other countries, and adverse events of sugammadex such as hypersensitivity tend to be dose-proportional [4]. Although the waiting time for recovery may be longer, careful administration of small doses may be more well-tolerated [5]. Lastly, during the 90-min period of emergence, it is likely that the patient would have struggled even if he was not able to move. There would have been various symptoms and signs that the patient had regained consciousness and experienced pain. Medications for pain relief and sedation had to be administered.

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