What are mechanisms of re-sedation caused by remimazolam?

Kohei Godai¹

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To the Editor:

I read with great interest the article “Re-sleeping after reversal of remimazolam by flumazenil” by Yamamoto et al. [1]. I think that this report is important, because rare phenomena only appear after a large amount of the new drug is used. I believe, however, that several issues need to be discussed. First, what are mechanisms of re-sedation caused by remimazolam? The authors provide little information about the case. Remimazolam package insert says “half-life is prolonged with increasing severity of hepatic impairment”. I think that the following information would be useful for the readers, perioperative opioids usage, patient’s past history including liver/kidney functions, sedation score and respiratory rate when the patient was under re-sedation. Second, the authors used flumazenil 0.5 mg immediately after remimazolam cessation. Why did the authors select the timing and dosage of flumazenil? The authors state that “all recommended dosages are used”. There is, however, no recommendation dosage about flumazenil [2]. Third, the authors seem to be confused about drug half-life. CSHT is defined as “the time required for the plasma drug concentration to decline by 50% after terminating each infusion” [3]. Although elimination half-life of remimazolam is about 40 min, CSHT is less than 10 min [4].

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Declarations

Conflict of interest None.

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✉ Kohei Godai
kxg179@icloud.com

¹ Department of Anesthesiology and Critical Care
Medicine, Graduate School of Medical and Dental
Sciences, Kagoshima University, 8-35-1 Sakuragaoka,
Kagoshima 890-8520, Japan