

Effect of intravenous dexmedetomidine-midazolam on fentanyl-induced cough

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Dear Sir,

We read with great interest the recent letter by Lawlor et al. [1] published in *Irish Journal of Medical Science*, referring to our original article [2] entitled “Premedication with intravenous dexmedetomidine-midazolam suppresses fentanyl-induced cough”. And we thank Lawlor et al. for his interest in our article and appreciate the opportunity to discuss the incidence of fentanyl-induced cough during general anesthesia.

In our study, we concluded that the incidence of fentanyl-induced cough (FIC) in Group S+M was obviously higher than that in the control group (63.6 vs. 40.9 %). Simultaneously, we also observed an interesting phenomenon in our study that some patients complained they had to restrain themselves from coughing by swallowing after administrated with fentanyl. We speculated that midazolam perhaps could eliminate this ability. Of course, if we had designed a study to explore the relationship between the degree of sedation and the incidence of FIC, it would be more persuasive.

In Lawlor and co-workers’s [1] experience, they rarely observed coughing during induction of general anesthesia administering an intravenous preinduction bolus dose of 100 µg via a peripheral intravenous cannula to their adult

patients. This method could be optional in clinic. However, they could not suppress FIC completely. Furthermore, it is still dangerous to patients with cerebral aneurysms, brain trauma, open eye injury, dissecting aortic aneurysm, pneumothorax or hypersensitive airway disease.

Pretreatment with dexmedetomidine can induce bradycardia and hypotension [3], but the dose of dexmedetomidine we had infused was low and it was safe for patients of ASA physical status class I or II in our study.

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Conflict of interest None.

References

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