

In reply: is dexmedetomidine or remifentanyl alone an optimal sedation scheme for awake intubation?

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To the Editor:

We thank Dr. Xue and coworkers for their thoughtful comments on our study. They have raised basically three questions. Firstly, they mention that there is still no optimal drug for awake intubation to meet all criteria and point out the usage of a single agent to provide sedation in our article as the main limitation of the study design.

We quite agree that there is, as yet, no ideal drug. In fact, one of the purposes for our study was to find more desirable drugs to improve patients' satisfaction during and after awake intubation. As a highly selective alpha-2 agonist, dexmedetomidine exerts sedative, analgesic and anxiolytic characteristics without respiratory depression during awake intubation. It has been reported as a sole sedative for awake fiberoptic intubation, particularly in managing critical airways [1, 2]. Remifentanyl is an attractive alternative because of its analgesic, sedative and anti-tussive characteristics. The TCI mode for remifentanyl makes it applicable in clinical practice [3]. We think the comparison of the two drugs' efficacy in awake fiberoptic intubation is quite meaningful. Moreover, we used single drugs in our study considering the potential confounding influences of other agents.

Secondly, they query the relatively high occurrence of coughing in our study. Dexmedetomidine is reported to blunt histamine-induced bronchoconstriction [4]. Pretreatment with a small dose of dexmedetomidine decreases

sufentanyl-induced coughs in anesthetic induction regardless of its sedative effect [5]. On the other hand, remifentanyl's effect on cough suppression seems to be dose dependent [6]. We administered the dosage to avoid respiratory depression in our pilot study. Although we reported the relatively high incidence of coughs in the dexmedetomidine group in our manuscript [7], most patients exhibit a slight cough of less than 2 s in reality.

Thirdly, Dr. Xue suggests that dexmedetomidine has no amnestic effect. However, a previous study indeed indicated that a small dose of dexmedetomidine results in about a 50 % impairment of memory [8]. Despite remifentanyl having a weaker amnestic effect, it is important to note that patients in the remifentanyl group did not suffer from recall of events and this is reflected in patients' satisfaction score.

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