

In Response: The Cause of Fatal Respiratory Depression Is Combination of Clindamycin and Fentanyl, Rather than Tramadol

To the Editor:

We would like to thank Dr. Gurpreet Dhaliwal for his attention to our work, "A Costly Lesson: Fatal respiratory depression induced by clindamycin during post-operative patient controlled analgesia" *Pain Physician* 2015;18:E429-E431. His questions are anesthesiology hotspots. In response to his question, we make the following points to reply:

1. Tramadol analgesic causes respiratory depression that is mainly mediated by opioid receptors. However, Tramadol is a weak opioid receptor agonist, and its metabolites O-desmethyltramadol is only about 1/10 of morphine, and fentanyl is a strong opioid receptor agonist, its potency is about 100 times morphine. When the two together, to be a major contributor to opioid receptors is fentanyl. Pradeep Bhatia was also held this view (1).
2. Tramadol poisoning is overdose. Under normal usage the key is patient's renal impairment and CYP2D6 gene duplication (2). We present a case of renal function in patients with normal. Further, in terms of Genotyping of CYP2D6, East Asian and Africans do not exist ultrarapid metabolizers (3). The CYP2D6*10 allele is the most common allele in the Chinese population, and correlated with a significantly

reduced metabolic activity of tramadol (4).

3. Of course, tramadol poisoning may cause respiratory depression, but tramadol poisoning generally will first appear with serotonin syndrome, such as rapid heartbeat, shortness of breath (5-7). This case does not appear respiratory tract spasms and rapid heartbeat.

For these reasons, we determined that tramadol is not as its factors of this case. Of course, if added together tramadol discussion, this paper will be perfect.

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