

Fentanyl-induced cough

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Introduction: Fentanyl administration frequently used during the induction of general anesthesia and can reduce hyper dynamic reaction of trachea. Fentanyl-induced cough is not an uncommon condition during the induction of general anesthesia.

Various attempts have been made to reduce the incidence of fentanyl-induced cough during anesthesia induction. Propofol may also induce bronchodilation. We hypothesized that an appropriate dose of propofol might suppress fentanyl-induced cough. So, we designed a randomized controlled study to observe the effects of propofol on fentanyl-induced cough during anesthesia induction.

Method: A total of 113 patients aged 25 to 60 years, of American Society of Anesthesiologists physical status I/II, scheduled to undergo elective orthopedic surgery with general anesthesia were enrolled in the present study. Patients were randomly allocated to two groups. Group 1 patients were given fentanyl at a dosage of 4 µg/kg; Group 2 patients received 4 µg/kg fentanyl and 20 mg propofol. Two groups were evaluating in 0,5,10 minute after injection. For statistical analysis, we used SPSS Statistics version 17 software.

Results: Patients Mean age was 35±10.96, weight 67.99±10.92, and height 161.33±31.84. The incidence of fentanyl induced cough was 29 (51.8%) in placebo group compared with 10 (17.5%) in fentanyl group There was significant difference in the incidence and severity of cough between groups 1 and 2 (p<0.000).

Conclusion: A priming dose of more than 20 mg of propofol given 1 minute before fentanyl is effective to suppress fentanyl-induced cough.

Key words: fentanyl, cough, propofol

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