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Effect of pre-treatment with intravenous Lidocaine in suppression of Fentanyl-induced cough

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Objectives: Intravenous lidocaine is effective in suppressing the cough reflex of tracheal intubation and extubation, bronchoscopy and laryngoscopy. This study was conducted because of elicitation of cough and excitation in patients can induce hemodynamic changes which are undesirable complications. **Methods:** The effect of lidocaine on fentanyl-induced cough in patients with ASA physical status I and II scheduled for elective Laparotomy surgery was examined. The patients were randomly divided into two groups and received lidocaine 1.5 mg/kg or placebo (0.9% saline), 1 min before administration of fentanyl with a dose of 3µg/kg. Incidences of cough was classified as presence and absence of coughing and graded as mild (1-2), moderate (3-4), or severe (5 or more). A double-blind method was employed throughout the study. **Results:** Out of 63 patients who received lidocaine, 55 patients did not cough (55vs: 38) and the difference was statistically significant (P<0.002), (There was no significant difference between the grades of coughing experienced by two groups), no side effect lidocaine was seen. **Conclusion:** It was demonstrated that IV lidocaine (1.5 mg/kg), administered one minute before fentanyl, is an effective and clinically feasible method for suppressing fentanyl-induced cough without causing lidocaine toxicity or side effect.

Key words: Lidocaine, Fentanyl, cough.

II I ASA
 (% /) / mg/kg
 (≤) () µg/kg
 : / mg/kg mg/kg
 .(P < /)
 / mg/kg

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/ mg/kg
 μg/kg
 %
 % ()
 / μg/kg
 ()
 / mg/kg
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 μg/kg
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 () (=)
 Chandra
 student's T- test
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 (P > /)
 P < / (Z test) proportion
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 II I ASA
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()	()	()
/ + /	/ ± /	()
/ + /	± /	()

(P < /) (% %)

()	()	()	()	()	()
(/)	(/)	(/)	(/)	(/)	(/)
(/)	(/)	(/)	(/)	(/)	(/)

() p= / *

			$\mu\text{g/kg}$		%
mg/kg	()		(%)		()
				($\mu\text{g/kg}$)	
		$\text{O}_2 + \text{N}_2\text{O}$		Phua ($\mu\text{g/kg}$)	Agarwal
	()			%	(/ $\mu\text{g/kg}$)
mg/kg			$\mu\text{g/kg}$	%	()
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/ mg/kg		()		()	
%				()	
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/ mg/kg			/ mg/kg		
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