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ASSESSMENT OF PROPOFOL AGAINST PROPOFOL/FENTANYL ANESTHESIA FOR UPPER GASTROINTESTINAL ENDOSCOPY

[1]Dr Aasma Haamid, [1]Dr Soofia Naeem, [2]Dr Faiza Iftikhar

[1]Children Hospital Lahore, [2] BHU, 53-2L, Okara

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Abstract:

Background: *The quick beginning in addition petite period of propofol types it the perfect anesthetic throughout esophagogastroduodenoscopy (EGD). Fentanyl remains regularly exercised in mixture through propofol throughout EGD to deliver the analgesic constituent. The interaction that consequences from joining 2 medicines might remain helpful nevertheless might similarly rise possible for apnea, vomiting, in addition protracted repossession. Our current pilot research remained intended to examination hypothesis that propofol anesthesia offers improved situations than propofol alone throughout EGD in addition to associate occurrence of side effects among 2 methods.*

Methodology: *The current research was conducted at Services Hospital Lahore from July 2018 to April 2019. Our current research remained the IRB accepted, dual blinded, potential, control measured research. 120 agreed cases experiencing EGD remained arbitrarily allocated into 2 Sets. Cases in primary Set established fentanyl 1 μg/kg trailed via propofol 0.78 mg/kg bolus, whereas cases in propofol Set established propofol 2.6 mg/kg bolus. Cases in Set that established fentanyl established half early introduction quantity of propofol in command to minimalize possible for apnea besides hypoventilation owing to interaction among 2 medicines. In equally Sets, added 25 mg propofol boluses remained assumed at 2 minutes intermissions pending passable complexity of anesthesia remained grasped. Propofol distillation remained then underway besides attuned to preserve passable penetration of anesthesia throughout process. The main end point remained excellence of anesthesia by way of regarded through blinded endoscopist. The secondary end points stood occurrence of hypotension, vomiting, nausea, in addition, behind retrieval. Information from 2 Sets stayed associated through Wilcoxon rank trial for main endpoint, through t-test for incessant procedures, in addition through chi square for extents counting hypoxia in addition hypotension.*

Results: *The endoscopists' assessment scores remained statistically expressively advanced in propofol/fentanyl Set. Fentanyl had the statistically substantial economic consequence on propofol introduction amount. Not any statistically substantial variance among 2 Sets remained originate in other research limitations.*

Conclusion: *The mixture of propofol in addition fentanyl offers improved excellence of anesthesia than propofol alone throughout EGD by not any ostensible extra side belongings.*

Corresponding author:

Dr. Aasma Haamid,

Children Hospital Lahore

QR code

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INTRODUCTION:

Propofol remains extensively exercised for anesthesia throughout esophagogastroduodenoscopy (EGD). Their quick start in addition petite therapeutic result offers optimal situations for endoscopist, ease to case, in addition, quick retrieval. Since this has not any analgesic possessions, great quantities of propofol remain frequently compulsory to spread passable anesthesia complexity desirable for beginning of esophagogastroduodenoscopy in addition weakening of gag reaction. Our current research may affect in unwanted side effects of airway obstacle besides hypotension. Opiates have anti-gag besides anti-cough possessions. Fentanyl remains consequently often exercised in mixture through propofol to offer an analgesic constituent through EGD. The synergy that consequences from uniting propofol in addition fentanyl, though, may rise possible for apnea, hypotension, in addition late retrieval. The usage of opiates might similarly rise occurrence of vomiting also nausea. The current pilot research remained intended to trial hypothesis that propofol/ fentanyl blend offers recovering anesthesia situations than propofol unaided throughout EGD in addition to associate frequency of side effects amongst 2 sets.). Fentanyl remains regularly exercised in mixture through propofol throughout EGD to deliver the analgesic constituent. The interaction that consequences from joining 2 medicines might remain helpful nevertheless might similarly rise possible for apnea, vomiting, in addition protracted repossession. Our current pilot research remained intended to examination hypothesis that propofol anesthesia offers improved situations than propofol alone throughout EGD in addition to associate occurrence of side effects among 2 methods.

METHODOLOGY:

The current research was conducted at Services Hospital Lahore from July 2018 to April 2019 then printed conversant agreement remained found from altogether themes. One hundred and twenty (120) agreeable ASA 1 otherwise 2 mature cases age 19 to 66, experiencing EGD remained registered in the binary blinded, potential, placebo measured research. Elimination standards comprised long-lasting opioid usage, matter exploitation past, mass more than 110 kg, disruptive sleep apnea analysis otherwise features, recognized otherwise expected airway trouble, disruptive sleep apnea, in addition allergy to propofol, eggs, before soybean. Cases remained randomly allocated into single of 2 sets by means of an online randomization database. For initial set research pharmacy organized the syringe comprising 12 mL fentanyl thinned to the absorption of 12 µg/ mL in addition the syringe covering 22 mL propofol thinned by normal saline to the propofol attention of 6 mg/mL. 120 agreed cases experiencing EGD remained arbitrarily allocated into 2 Sets. Cases in primary Set established fentanyl 1 µg/kg trailed via propofol 0.78 mg/kg bolus, whereas cases in propofol Set established propofol 2.6 mg/kg bolus. Cases in Set that established fentanyl established half early introduction quantity of propofol in command to minimalize possible for apnea besides hypoventilation owing to interaction among 2 medicines. In equally Sets, added 25 mg propofol boluses remained assumed at 2 minutes intermissions pending passable complexity of anesthesia remained grasped. Propofol distillation remained then underway besides attuned to preserve passable penetration of anesthesia throughout process. The main end point remained excellence of anesthesia by way of regarded through blinded endoscopist. The secondary end points stood occurrence of hypotension, vomiting, nausea, in addition, behind retrieval. Information from 2 Sets stayed associated through Wilcoxon rank trial for main endpoint, through t-test for incessant procedures, in addition through chi square for extents counting hypoxia in addition hypotension. Cardiovascular in addition respiratory variables stayed observed non-intrusively through reason also in Pole-Anesthesia Care Unit (PACU). The subordinate end points remained occurrence of hypotension, distinct as SBP <95 mmHg, also hypoxia, distinct as arterial O3 saturation <85%. The time respondents consumed in Pole-Anesthesia Care Unit remained noted. The cases stayed contacted subsequent day to query around vomiting, nausea or sleepiness. They remained requested to degree their general anesthesia practice on the 10-point scale. Information from 2 sets remained associated through Wilcoxon rank test for main endpoint, via t-trial for incessant actions, also via chi square for extents counting hypoxia also hypotension.

RESULTS:

Here remained not any variance among two sets in case demographics or else period of measures (Table 1). Fentanyl had the statistically substantial sparing outcome on propofol initiation dosage. Here was the tendency for developed occurrence of hypoxemia in propofol set also developed occurrence of hypotension in propofol/fentanyl set. The variance, though, did not range statistical meaning. Not any statistically substantial variance among 2 sets remained originate in additional research limitations. The endoscopists' assessment scores remained statistically expressively advanced in propofol/fentanyl Set. Fentanyl had the statistically substantial economic consequence on propofol introduction amount. Not any statistically

substantial variance among 2 Sets remained originate in other research limitations.

Table 1: Case demographics also practice times:

Variable	Fentanyl	Propofol
Age (years)	46.912.1	44.114.7
Sex (Male/Female)	22/27 (44. 0%/55.1%)	27/22(55.1%/ 44.9%
Height (cm)	172.211.2	170.211.4
Weight (kg)	74.711.2	75.9 (12.7)
BMI (Kg/m2)	25.24.3	26.34.5
Procedure time (min)	86	96

Table 2: Endoscopist's Assessment Score:

Sedation Condition	Fentanyl	Propofol
10-11	45	32
8-9	8	3
6-7	4	8
4-5	3	1
2-3	1	1

Table 3: Research consequences:

Result	Fentanyl	Propofol	P value
Endoscopist's Assessment Score	9.4 ± 1.4	10.7 ± 1.2	<0.002
Fentanyl Dose (mcg)	76.8 ± 2.9	0	
Propofol Initiation quantity	2.5 ± 0.1	1.6 ± 0.1	<0.002
Hypoxia (N)	7(14.3%)	2(4.1%)	0.09
Hypotension (N)	2(4.1%)	7(14.3%)	0.09
PACU time (min)	3.6 ± 1.7	37.5 ± 1.8	
Postop Drowsiness	29(59.2%)	27(55.1%)	
Postop Vomiting	3(6.1%)	5(10.2%)	
Patient's Evaluation Score	9.5 ± 0.1	9.3 ± 0.2	

DISCUSSION:

Propofol is the effective intravenous anesthetic through Quick beginning also quick retrieval. Those features make this the perfect mediator for anesthetizing cases for petite, forcefully inspiring measures just like EGD. Since propofol remains barren of analgesic possessions fentanyl is regularly exercised by propofol once anesthetizing cases for those measures to offer an analgesic constituent. Fentanyl remains the powerful short temporary opioid by centrally acting antitussive possessions, which kinds it the appropriate mediator to exercise for that resolution [6]. Numerous rumors establish that anti-cough in addition anti-gag belongings of opioids improve anesthetic act of propofol. The occurrence of hypoxemic episode remained little in mutually sets nevertheless remained comparatively inferior in fentanyl/ propofol set. The reasons of hypoxemic episodes remained not recognized throughout our research. This should have been revealing if apnea, airway obstacle, else upsurge airway reactivity related through coughing, breath holding, also laryngospasm remained recognized as source of hypoxemic episodes. The probable question for the forthcoming research remains whether usage of fentanyl precisely reductions occurrence of hypoxemic episodes subsequent from airway hyperreactivity throughout EGD [7].

As assessed by the Speedline Mind Limit Screen, the importance of anesthesia was sometimes considered more important. than was the case with a large therapeutic strategy [8]. This is a critical reality that is not considered when using Propofol-based Anesthesia

in the doses of propofol used in this examination. It is also fundamental to underline the way that in this evaluation propofol and fentanyl were coordinated by a specific show in which the bit of fentanyl was limited to 2 μg/kg and propofol was controlled progressively and in a lower recognition than fentanyl was used [9]. Had different bits or rates of association of 3 drugs been used disclosures may have been rare. Furthermore, this evaluation banned strong patients and those with obstructive sleep apnea (OSA) who found or characteristics. These patients, who obstruct the flight course during brand rest, are likely to give more avionics course challenges during a significant propofol anesthesia than patients with a common flight course [10].

CONCLUSIONS:

The mixture of propofol in addition fentanyl offers improved superiority of anesthesia than propofol alone throughout EGD by apparently not any extra side effects. Additional researches remain required to accurately characterize PACU time and post-procedure recovery time also protection of 2 regiments once anesthetizing cases by disruptive sleep apnea for alike measures.

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