Impact of the additive ketamine or fentanyl on quality of sedation in endoscopic ultrasonography with propofol

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Background and Goal of Study:

Application of the endoscopic procedures under anesthesia was increased according to improve patients comfort and satisfaction. Various medical combinations are used for this manner. Here in this study, we aimed to compare the quality of sedation on endoscopic ultrasonography (EUS) application with propofol- fentanyl and propofol- ketamin combination.

Materials and methods:

Ninety patients with scheduled EUS were enrolled to study. After premedication, sedation anesthesia was performed with 1,5 mg.kg⁻¹ Propofol, 1 mg.kg⁻¹ Ketamin in Group K and 1,5 mg.kg⁻¹ Propofol, 1 mcg.kg⁻¹ Fentanil in Grup F. In the situation of inadequate anesthesia, additive 0,2 mg/kg Propofol was performed. Richmond Agitation Score (RAS), hear rate (HR), mean systolic-diastolic blood pressure, peripheral oxygen saturation (SpO₂), duration of procedure and used propofol doses were recorded. Nausea and vomiting, Numeric Rank Score, visual analog scale (VAS) and Aldrete score were recorded postoperatively. The satisfaction of doctor and patients were scored between 0-4.

Results and discussion:

Total used propofol dose and PACU discharge time were significantly lower in Group F ($p < 0.001$). Intraoperative HR and TA were more stable in Group F rather than Group K ($p:0.002$) however intraoperative SpO₂ levels were similar between groups. HR, TA at the entrance of PACU and PACU discharge time was significantly increased in Group K ($p < 0.001$). Patients satisfaction was significantly improved in Group F ($p:0.01$) but no difference was found for doctor's satisfaction.

Conclusion(s): Propofol- Fentanyl combination is found to be more comfortable in esophageal, gastric and pancreaticobiliar EUS application especially in advanced age and the presence of concomitant disease rather than propofol- ketamin combination.

References:

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 2. Saurabh Sethi, Vaibhav Wadhwa, Adarsh Thaker et. all. Propofol versus traditional sedative agents for advanced endoscopic procedures: A meta-analysis. Digestive Endoscopy 2013; doi: 10.1111/den.12219
- Ethical Research Declaration:
1. Prospective observational only studies
Preferred Presentation Type: Clinical or experimental study.