Anesthesia for flexible diagnostic bronchoscopy: comparison of two different techniques

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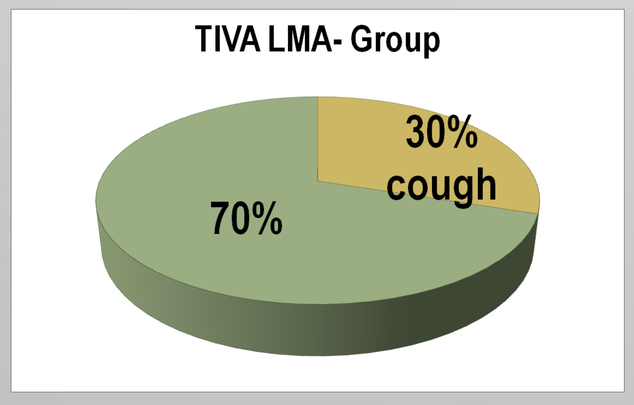
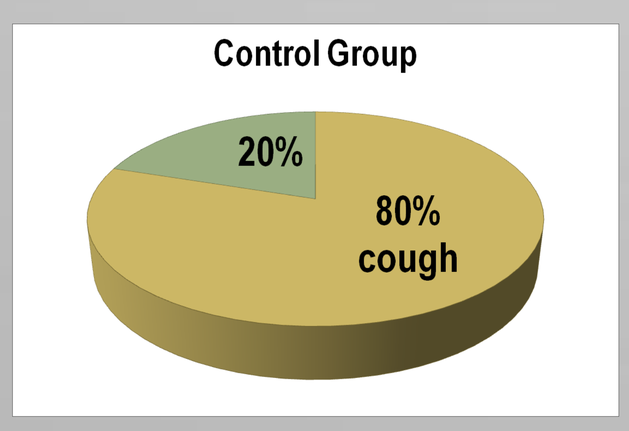
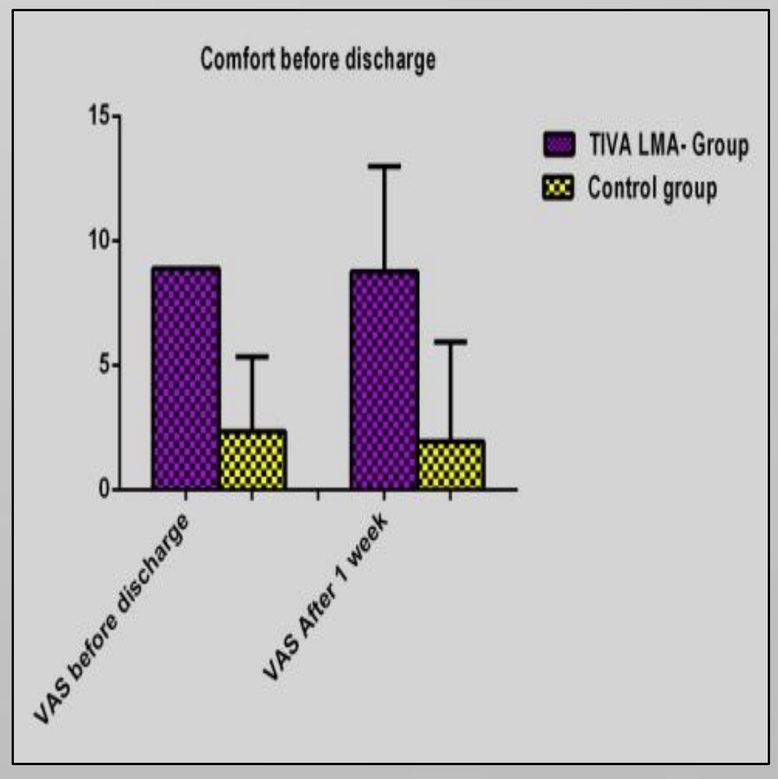
Background and Goal of Study: the ideal sedation for flexible bronchoscopy (FOB) has not been defined [1]. The aim of the study was to compare to perform FOB on deep-sedation associated with the insertion of laryngeal mask with a more common technique of consciousness sedation provided by midazolam in terms of safety, patient's comfort, success of the previously mention procedures at the first attempt.

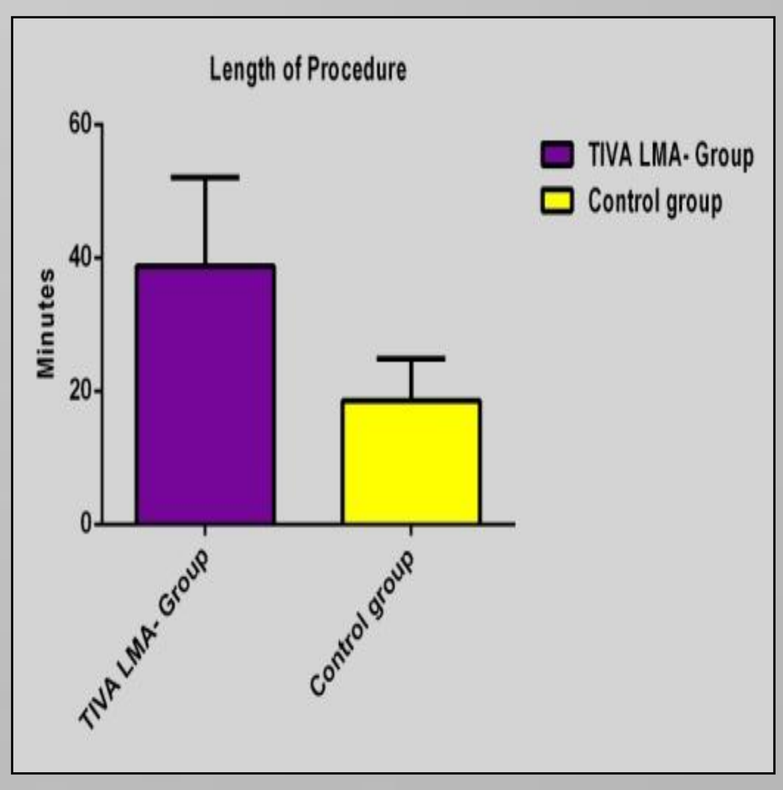
Materials and Methods: 24 patients, mean age 61.9±10.25 years, ASA physical status I-III undergoing diagnostic FOB were enrolled. Data collected from each procedure were: cough episodes, dyspnea, procedures'duration. Patients were randomized in two groups: in **TIVA-LMA Group** after induction (Propofol 2 mg/Kg, remfentanyl 0,10 µg/Kg/min) LMA (Ambu AURA-i) was inserted (maintenance was provided by propofol 2% at 1,5-2 mg/Kg/h and remifentanyl 0,10-0,15 µg/Kg/min) and FOB was performed through the LMA; breathing was achieved through manual ventilation. Flexible bronchoscope (Pentax 6 mm) was inserted through Mount catheter (DAR/Covidien) and advanced into the LMA. In **Control Group**: before starting procedure 0,03-0,05 mg/Kg of Midazolam (5-6 mg) were administered, spontaneous breathing was maintained for the entire procedure. At the end of the procedure all patients were discharged after evaluation of Aldrate's score. Patient's comfort was evaluated by VAS scale.

Results and Discussion: There were no differences between two groups in term of age, sex, ASA, BMI, comorbidity. **TIVA-LMA Group** showed lower number of cough episodes during procedure (30% vs. 80%), better comfort for patients before discharge (8,88±0 vs. 2,33±3; p<0,00005) and after one week (8,75±4,24 vs. 1,94±4;p<0,001) verified by a phone interview, longer duration of procedure (38.8±13.2 vs. 18.56±6.3 minutes, p=0.001).In both group all procedures had success at the first attempt. None of patients showed major complications.









Conclusions: deep-sedation-LMA technique seems to have lower side effects and better comfort for patients. A longer time of lasting of the procedure could be related to a major accuracy, but a largest patient's population is needed to confirm this hypothesis.

References: 1. *Honeybourne D et Al. Thorax. 2001*