Flexible bronchoscopy through Laryngeal Mask Ambu Aura iTM for diagnostics procedures

Nella A, Pagano D, Simonelli M, Corbetta L, Malino L*, Pavoni V
University Hospital Careggi, Florence, Italy
*Scientific Manager, Ambu, Italy

Background and Goal of Study: the ideal technique to ensure airway control during flexible bronchoscopy (FOB) has not been defined [1]. The aim of the study is to describe a technique of deep-sedation associated with the use of Aura-iTM disposable intubating laryngeal mask (Ambu A / S, Ballerup, Denmark), as a conduit for flexible bronchoscope (FOB) during procedures of Trans Bronchial Needle Aspiration(TBNA), Trans Bronchial Biopsy (TBB) and endobronchial ultrasound TBNA (EBUS-TBNA).

Materials and Methods: 25 patients, both sex (male n° 15/female n°10), mean age 62±1.4, ASA physical status I-III undergoing diagnostic bronchoscopy were enrolled between January-April 2013. Data collected from each procedure included: feasibility of FOB through laryngeal mask (LMA), quality of airway images, dyspnea and pain at the end of procedure and patients’ comfort. Anesthesia was provided by standard induction with Propofol 2 mg/Kg and remifentanil 0,10 µg/Kg/min, then LMA was inserted and maintenance was provided by propofol 2% at 1,5-2 mg/Kg/h and remifentanil 0,10-0,15 µg/Kg/min. Bronchoscopy was performed through the LMA and breathing was achieved through manual ventilation. Flexible bronchoscope (Pentax 6 mm) was inserted through Mount catheter (DAR/Covidien) and advanced into the LMA. At the end of the procedure all patients were discharged after evaluation of Aldrate’s score. Patient’s comfort and pain was evaluated by VAS scale before discharge.

Results and Discussion: in this setting LMA was use as both a ventilation device and a conduit for flexible bronchoscope. FOB introduction was feasible in all patients. For each patients we found an higher satisfaction before discharge and the entire group would repeated, if necessary, this procedure with the same anesthesia technique.

Referred comfort was high after the procedure (VAS 8±2) and also after one week (VAS 9±1). None of patients referred dyspnea before discharge as well as pain. All procedures had success at the first attempt. No major complications occurred during procedures.

Conclusion(s): FOB associated with deep-sedation-LMA technique has goods results in terms of patient’s comfort and in terms of lower incidence of pain and dyspnea at the end of procedure.

References: 1. Wahidi MM et Al Chest, 2011