Propero Calabrese, Salvatore Romeo, Giacomo Castiglione, Massimiliano Sorbello, Salvatore Nicosia. AOU Policlinico Vittorio Emanuele, Catania, Italy
E-mail address: PLUTOST@TISCALI.IT (P. Calabrese).

Background and goal of the study: We report of a case of unexpected difficult intubation despite preoperative evaluation.

Methods: A 67 years male patient scheduled for laparoscopic prostatectomy went for preoperative evaluation with the following findings: moderate obesity (BMI32), adequate mouth opening and thyromental distance, Mallampati III, history of snoring. In perspective of difficult mask ventilation he was requested to remove beard.

Results: After routine monitoring and anesthesia induction, with NMBA administration following ventilability check, a first laryngoscopy revealed a Cormack-Lehane grade 3 view with limited room for airway instrumentation. After one failed conventional laryngoscopy two attempts with Airtraq (Prodol, Spain) failed because of view of sole epiglottis. Ventilation remained satisfactory thorough attempts, and a #4 LMA-fastrach (Teleflex, Ireland) was positioned resulting in poor ventilation and no view of laryngeal inlet with fiberoptic bronchoscope. Patient was then reverted to spontaneous breathing (atropine-neostigmine) and a spontaneous breathing fiberoptic intubation with a reinforced 6.5 mm OD endotracheal tube was successful, using the spray-as-you-go technique for airway topicalization. Surgery was performed and the patient received a protected extubation over airway catheter.

Conclusions: Our case highlights importance of ventilation over intubation, importance of preoperative evaluation (the patient, deferred to pneumologist, was diagnosed severe OSAS), possibility of failure of videolaryngoscopy, importance of avoidance of fixation error and fundamental role of fiberoptic, with spontaneous breathing, for difficult airway management.

References


Topic: Equipment
ID ABS WEB: 92311

A COMPARISON OF GLIDESCOPE TITANIUM WITH KINGVISION (CHANNELED BLADE) FOR TRACHEAL INTUBATION IN OBESE PATIENTS IN ELECTIVE PROCEDURES

Jan Bruthans, Pavel Michalek, Tomas Brozek. Department of Anesthesiology and Intensive Care, First Faculty of Medicine, Charles University, Prague, Czech Republic
E-mail address: JAN@BRUTHANS.CZ (J. Bruthans).

Background and goal of the study: Videolaryngoscopes may provide better intubation conditions in obese and super-obese. However, evidence from published studies is rather sparse. The goal was to compare intubation success rates, speed of tracheal intubation and complications in obese patients with BMI>35 between two types – GlideScope Titanium (GS) and channeled KingVision (KV) device.

Methods: After obtaining informed consent from the Local Ethical Committee and study registration, in total 110 obese patients scheduled for elective surgical procedures were randomly assigned — 55 were intubated with GS while remaining with the KV. Power analysis and sample size calculation were performed prior to study submission. Primary outcome was time to successful tracheal intubation as confirmed by first visible etCO2 on the monitor. Secondary outcomes included total success rate, success on the first attempt, Cormack-Lehane laryngoscopic views, changes in oxygen saturation, incidence of trauma during intubation and postoperative complications including sore throat, swallowing difficulties, hoarseness and cough.

Results: Data was tested for normality and then analyzed using Mann-Whitney or Fisher exact test. P<0.05 was considered as statistically significant. Demographic parameters, as well as preoperative airway examinations did not differ between the groups. Intubation time was 54s (95%CI 47-62) in GS group and 43s (95%CI 37-46) in the KV group; p=0.006. Total success rate was 100% in the GS group, while it was only 89% in the KV group (p=0.03). Success on the first attempt was 89% in the GS group and 73% in the KV group (p=0.05). Reasons for failure to intubate included poor CL views and obstruction of optical channel with blood or sputum. The differences in minimal spo2 were insignificant. Both groups did not differ in the incidence of complications.

Conclusions: The GS showed extremely high success rate in obese and super-obese patients and should be preferred over the KV in this population despite a longer intubation time.

Topic: Equipment
ID ABS WEB: 92583

USE OF THE VIVASIGHT-DL (AMBU®) DOUBLE LUMEN TUBE FOR OESOPHAGEAL SURGERY

Edward Benison. Wrexham Maelor Hospital, Wrexham, United Kingdom
E-mail address: EDWARD.BENISON@GMAIL.COM

Background and goal of the study: Oesophageal surgery carries substantial associated morbidity and mortality with a 25% 5 year survival. On average, 50 oesophagectomies are performed each year in our institution. Both Ivor-Lewis and Minimally Invasive Oesophagectomy (MIO) approaches may require a double lumen tube (DLT) as well as intraoperative patient repositioning to left lateral and prone, respectively. We piloted the use of the left sided VivaSight-DL (Ambu®) DLT during oesophageal surgery as an alternative to the standard combination of single use DLT (Mallinkrodt®’s Broncho-Cath™) and flexible bronchoscope (Ambu® aView™ 4 slim).

Methods: Between February and August 2018, 12 patients undergoing elective oesophagectomy were intubated with the VivaSight-DL. This single-use DLT has an inbuilt camera at the distal tracheal lumen. Connection to the Ambu® aView™ screen is via a specific cable provided in the pack and guarantees continuous visual feedback throughout induction, intubation and surgery. Lens clearance is achieved by a suction/flush port.