



ORIGINAL RESEARCH PAPER

Anaesthesiology

AWAKE FIBER OPTIC INTUBATION IN A PATIENT OF POST COMBINED MANDIBULECTOMY AND NECK DISSECTION OPERATION.

KEY WORDS: Awake intubation, difficult intubation, topical anaesthesia, distorted facial anatomy, psychological preparation

Dr. Monal Ramani

Dr. Siddharth Parmar*

Dr. Ritu Ruparel *Corresponding Author

Dr. Prachi Agnihotri

ABSTRACT

Combined mandibulectomy and neck dissection operation is an procedure for malignant tumors of floor of oral cavity which involves partial removal of mandible, floor of mouth and/or tongue accompanied by radical neck dissection which creates very difficult airway for these patients for any subsequent surgeries. We report a case of 52 year male patient posted for left PCNL(Percutaneous Nephrolithotomy) surgery for renal stone, who was previously operated for left sided Combined mandibulectomy and neck dissection operation procedure for oral cancer under general anesthesia. After thorough preoperative preparation fiberoptic intubation was done successfully in this spontaneously breathing awake patient under topical anesthesia, correct endotracheal placement of tube was checked and intravenous anesthetics were given. Patient was successfully extubated after regaining of proper respiratory efforts and fully awake state.

INTRODUCTION-

Malignant tumors of floor of mouth requires .Combined Mandibulectomy and Neck dissection operation (COMMANDO). This creates distorted anatomy, difficult airway for these patients for any subsequent surgeries. Management of recognized difficult airway after proper preoperative assessment and use of local anesthetics provides sufficient patient's comfort and adequate intubating conditions along with stable hemodynamics. Awake fiberoptic intubation may be indication in suspected difficulty with mask ventilation or tracheal intubation.

CASE REPORT-

A 52 year male patient posted for left PCNL surgery for renal stone with complain of pyrexia and pain in left flank. He had undergone left sided COMMANDO procedure for oral cancer 6 years back under general anesthesia .after thorough assessment and preoperative investigations he was posted for the surgery. Airway assessment showed mouth opening of one and half finger and Mallampatti grade III .Difficult airway cart was prepared. After written and informed consent and checking NBM status patient was taken in operation theatre. Monitors were attached, 18G intracath was secured .Local site preparation with topical anesthesia with gargles of 30ml of lignocaine 4% , 2% lidocaine instillation 5 ml on posterior pharyngeal wall and transtracheal Inj. of 4ml of 2% lignocaine was done. Premedication with Inj. Glycopyrrolate 0.2mg , Inj. Ondansetron 8mg, Inj. Midazolam 1-5mg slowly and Inj. Fentanyl 70 mcg. , all intravenously were given. After Preoxygenation with 100% Oxygen at 8L/min for 3-5 min awake fiberoptic intubation with 7.5 mm flexometallic endotracheal tube(ETT) which was railroaded over fiberoptic scope into trachea, the scope was then withdrawn and ETT connected to ventilator circuit and sidestream capnometer was attached. After confirmation with capnograph and chest rise and maintained saturation, Inj.Propofol 150mg IV and Inj. Vecuronium 4mg loading IV were given. Patient was turned into prone position for PCNL surgery. Maintenance was done with O2, N2O and Sevoflurane and incremental doses of vecuronium. Intraoperative precautions, proper positioning and utmost care to avoid accidental extubation was taken. On of completion of surgery after making the patient supine after oral and endotracheal suctioning, extubation was done only after he became awake and adequate respiratory efforts and muscle power was gained.

DISCUSSION-

Awake intubation may be indicated in a case of known or suspected difficulty with mask ventilation or tracheal intubation. Antisialogues and local anesthetics provide suitable condition for

awake intubation. Sedation enables improved patient tolerance but oversedation can cause airway obstruction and respiratory depression or apnea resulting in significant morbidity and mortality. Also induction can lead to can't intubate can't ventilate situation. Preparation of difficult intubation cart is must. Awake intubation requires skilled anesthetists. The chances of accidental dislodment of the ETT should also be considered. In our case via awake fiberoptic intubation airway was secured, intraoperative care to avoid accidental extubation and postoperative extubation was done only after proper respiratory efforts and muscle power was regained and patient was awake.

CONCLUSION-

Awake fiberoptic intubation provides great option for patient with decreased mouth opening and distorted facial anatomy. A thorough preoperative assement and definitive plan for cannot intubate cannot ventilate with available equipments, before proceeding for further management is necessary. Preparing the patient psychologically and preparing the airway with local anesthetics prior to the procedure is of utmost importance for patient's comfort and successful fiberoptic intubation.Plan to extubate patient after adequate respiratory efforts and adequate muscle power is important in such airway irregularities and difficult intubation.

REFERENCES-

1. Baral B.K., Ide S., Uzawa M., Sasaki H. and Kamawamata M.(2015) Conscious sedation and awake fiberoptic intubation in a patient with difficult mask ventilation a case report, *Open Journal of Anaesthesiology* ,5; 206-210.
2. Ayeko MO, Mohan G, Basha AA.Successful awake nasal fiberoptic intubation in a patient with restricted mouth opening due large tongue flap. *Saudi Journal of Anesthesia* 2015 Jan; 9(1): 100-1.
3. Hakala P, Randell T, Valli H. Comparison between tracheal tubes for orotracheal fiberoptic intubation. *British. Journal of Anaesthesia* 1999;82:135-6
4. Gupta S, Sharma R, Jain D. Airway assessment :Prediction of difficult airway. *Indian Journal of Anaesthesiology* 2005;49:257-62