

A PROBLEM IN NASOTRACHEAL INTUBATION

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Problems related to airway are usually common in anaesthetic practice. Difficult intubations and undetected oesophageal intubations are among them.

The following incident describes an unusual cause of an airway problem that occurred in an oncosurgical theatre suite.

A 50 year old mother of 2 children, presented for excision of a palatal growth in an elective surgical list. She was morbidly obese with a height of 140 cm and a weight of 85 kg (BMI=42). She had no other medical problems.

Patient was taken to the theatre, monitoring established (ECG, Pulse oxymeter, Blood pressure), Intra Venous (IV) cannulation done and preoxygenated. The patient was induced with morphine 6mg and propofol 150mg intravenously. Ability to ventilate was confirmed and suxamethonium 100mg IV was given. Once the fasciculations were over, planned nasal intubation was attempted with a size 7 (internal diameter of 7 mm) endo tracheal tube. It was difficult to pass through the nostrils. A size 6 tube was inserted through the nostril, circuit connected and hand ventilation continued to confirm the correct position of the tube. No breath sounds were heard over the chest. Listening over the left hypochondrium showed that it was not in the oesophagus. Direct laryngoscopy conformed the position of the tube. During the next few minutes the patient began to desaturate. It did not improve inspite of hand ventilation with 100% oxygen. Patient developed bradycardia and was in a near arrest situation. The ET tube was removed and replaced by a laryngeal mask airway. This improved oxygenation and saturation picked up to 99%.

On close observation of the endotracheal tube it was found to be obstructed with a plug of tissue.

Discussion-

Further inquiry into the incident showed that the anaesthetist who intubated the patient had not applied an undue force to send the tube through the nostril. Further the normal anatomical passage through the nasopharynx might have been distorted by the presence of palatal growth.

Several other reasons contributed to the problem

- Unavailability of capnogram- In the presence of capnogram, ventilatory inadequacy would have been detected before the patient desaturated.
- Morbid obesity of the patient-This indirectly pushed us to irrational decision making.
- Not attending in order of A-B-C, though the A was apparently attended, B was not really attended.
- We should follow universal guidelines in order of priority in managing critical clinical situations.

The most important conclusion that we can draw from this incident is when nasotracheal intubation is done the tube passes through more anatomical structures than in orotracheal intubation. Tube obstruction with tissue is more likely and should be suspected at an early stage, if ventilation is not adequate.

Finally, the importance of "LMA" to manage the airway in a crisis situation is once again proven.

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Workshop

on

Primary Trauma Care

*Venue - Trauma Lecture Hall
National Hospital, Sri Lanka*

Date - on Thursdays

Time - 9.00 am

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