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RESEARCH ARTICLE

ANKYLOSIS OF THE TEMPOROMANDIBULAR JOINT

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Abstract

Introduction: Difficult intubation is a very dreaded situation in anesthesia and is frequently encountered in maxillofacial surgery 15.7%(1) particularly in patients with ankylosis of the joint temporomandibular (TMJ); the scarcity of equipment used in the event of difficult intubation (ID) such as that a nasofiberscopy represents a challenge and requires the use of other techniques (2). The interest of our study is to show the importance of capnography and ultrasound guidance during an ID blind nasotracheal. Comment: It concerns the management of the respiratory tract of a patient aged 41 years and 78 kg followed for epilepsy since childhood, subtegritol 200mgx2/jet with congenital TMJ ankylosis. On the basis of preoperative clinical and radiological results, we have found the criteria for ID in particular the impossibility of opening the mouth and with the resources available, an intubation nasotracheal surgery under general anesthesia with spontaneous breathing was considered and a written informed consent for an emergency tracheotomy if required has been obtained from the patient. The procedure successively consisted of pre-oxygenation of the facial mask, xylocaine 0.05% a been sprayed into the right nostril, 0.05% xylocaine gargle, blockage of the laryngeal nerves superior by transcutaneous injections of lidocaine 1% and intra-tracheally, then we performed sedation with propofol 50mg. Blind nasotracheal intubation was successful in one uneventful attempt per No. 6.5 mm reinforced probe, the verification was made by visualizing the intra-tracheal probe at through ultrasound and confirmation by capnography. The anesthesia was completed by the administration of fentanyl 250 gamma, propofol 100 mg and rocuronium 40mg. Maintenance of anesthesia was performed by a mixture of isoflurane (1.5%) and oxygen and air (50%:50%). The patient was extubated after the surgical procedure and the operation was a success.

Conclusion: The anesthesia of patients with TMJ ankylosis represents a situation where the difficulties tracheal intubation should be considered in principle, and where an anticipatory strategy should be developed. Due to the absence of anasofiberscopy, the anesthetic treatment must be carried out by a team experienced and trained in blind ID.

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Introduction:

Difficult intubation is a very dreaded situation in anesthesia and is frequently encountered in maxillofacial surgery 15.7%(1) particularly in patients with ankylosis of the joint temporomandibular (TMJ); the scarcity of equipment used in the event of difficult intubation (ID) such as that a nasofibroscope represents a challenge and requires the use of other techniques (2). The interest of our study is to show the importance of capnography and ultrasound guidance during an ID blind nasotracheal.

Comment:

It concerns the management of the respiratory tract of a patient aged 41 years and 78 kg followed for epilepsy since childhood, subtegetrol 200mgx2/jet with congenital TMJ ankylosis. On the basis of preoperative clinical and radiological results, we have found the criteria for ID in particular the impossibility of opening the mouth and with the resources available, an intubation nasotracheal surgery under general anesthesia with spontaneous breathing was considered and a written informed consent for an emergency tracheotomy if required has been obtained from the patient. The procedure successively consisted of pre-oxygenation of the facial mask, xylocaine 0.05%a been sprayed into the right nostril, 0.05% xylocaine gargle, blockage of the laryngeal nerves superior by transcutaneous injections of lidocaine 1% and intra-tracheally, then we performed sedation with propofol 50mg. Blind nasotracheal intubation was successful in one uneventful attempt per No. 6.5 mm reinforced probe, the verification was made by visualizing the intra-tracheal probe at through ultrasound and confirmation by capnography. The anesthesia was completed by the administration of fentanyl 250 µg, propofol 100 mg and rocuronium 40mg. Maintenance of anesthesia was performed by a mixture of isoflurane (1.5%) and oxygen and air (50%:50%). The patient was extubated after the surgical procedure and the operation was a success.



Discussion:

TMJ ankylosis is an important functional, nutritional and social problem. Loading is marked by the difficulty in managing the airways, due to the mouth opening being very limited and the lack of tools appropriate to the ID. updating of the conference of experts from the French society of anesthesia and resuscitation in the event of

difficulty in controlling the airways is recommended in this circumstance (3), pre-oxygenation of the face mask is important to have a good supply of oxygen in the event of failure blind intubation, 0.05% xylocaine was sprayed into the nostril and gargled with xylocaine 0.05% to anesthetize the rhino and hypo-pharyngeal region, blocking the upper laryngeal nerves by transcutaneous injections of lidocaine 1% which allowed the opening of the vocal cords and lidocaine 1% intratracheally with analgesia. In the face of blind nasotracheal intubation, capnography makes it possible to follow the path towards the glottic opening, and it also helps to confirm the final placement of the tracheal tube ultrasound identifies the placement of the esophagus, which can help manipulate the direction of insertion of the tubing(4). We suggest considering this technique in the presence of TMJ ankylosis, however intubation blind nasal intubation takes longer to achieve than conventional intubation and it should be undertaken by clinicians familiar with this technique. Fiberoptic nasofibrosocopy should be preferred over ID to reduce the risk of failure and trauma.

Conclusion:

Conclusion: The anesthesia of patients with TMJ ankylosis represents a situation where the difficulties tracheal intubation should be considered in principle, and where an anticipatory strategy should be developed. Due to the absence of anosofibrosocopy, the anesthetic treatment must be carried out by a team experienced and trained in blind ID.

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