Case report: Difficult Intubation in paediatric patient with a large lymphangioma at the over-hyoid region and macroglossia

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Background: Lymphangioma is a congenital malformation of lymphatic system and it often involves the oral cavity so the "macroglossia" is linked by this pathway. A mass, in the over-hyoid region in pediatric patient, takes place on the upper airways and the usual laryngoscope endotracheal intubation could be impossible. The aim of this case study is to show a successfull endotraheal intubation by optic fiber broncoscopy guidance (FBG) and by continuous positive airway ventilation (CPAV) by nasopharynx tube during procedure.
Case Report: A 16 months-old male infant patient (13,00 kg wegth) was proposed our center hospital for unergoing the reduction surgery of tongue mass of over hyod space.
At time of presentation the infant had no other comorbidity and the physiological breath was not yet compromised. Therefore he was rejected by several paediatric hospital centers without finding any solutions. The preoperative medication was performed with endorectal administration of midazolam 0,5 mg/kg/atropine 0.01mg/kg and lidocaine cream was applied in venouspuncture site for line inserction. After standard monitoring (NiPM,Sp02,ECG) and the two minutes of preoxygenation, the patient underwent induction with Ketamine 2mg/kg IV by keeping spontaneus breath, inserted a nasopharynx tube for Sevorane/Oxygen administration and CPAP ventilation. A 3,5 mm diameter FBG inserting into 4 mm soft endotracheal tube was used : after idividualizing the anathomic structures of retropharingeal space and the vocals cords, the endotracheal intubation was performed at the first attemp without any complication.
Results: The surgery covered 5 hours without any anesthetic and respiratory implications. The patient was carried on Paediatric Intensive Care Unit for postoperative monitoring : the extubation occured after 24 hours and the patient was discharged from hospital12 days after the procedure with success.
Conclusions: Only working team (surgeon,anesthetist,intensivist) linked to the experience of all operators makes a difference after planning a common strategy. In this case a nasopharyngeal CPAP, the FBG and the deep sedation in spontaneus brething has been the best choice and intubation was performed successfully at the first attempt. Therefore it's not possible to standardize the technique and every few cases must be discussed.