

Anaesthetic Management of a Large Atypical Antrochoanal Polyp for FESS

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Abstract: *Antrochoanal polyps usually present with nasal obstruction in children and young adults. This is a case of a large antrochoanal polyp causing nasal obstruction, change in voice and dysphagia in an adult female. Change in voice and dysphagia are uncommon symptoms of antrochoanal polyp suggesting oropharyngeal and hypo pharyngeal extension. It presented an anesthetic challenge due to difficult airway. Functional endoscopic sinus surgery was done under general anesthesia and polyp was excised in Toto.*

Keywords: antrochoanal polyp, FESS, airway obstruction

1. Introduction

Antrochoanal polyps (ACP) are benign lesions that arise from the mucosa of the maxillary sinus, grow into the maxillary sinus, reach the choana and nasal obstruction being their main symptom.[1] They are usually seen in children and young adults. The main presenting symptom is nasal blockade and rhinorrhoea. Dysphagia, change in voice and obstructive sleep apnoea are unusual presentation of this disease.[2] Our patient had a large antrochoanal polyp which is extending beyond hyoid bone and reaching almost up to the epiglottis.

2. Case History

We are reporting a case of 30 years old female presented in our institute with complaints of left side nasal blockade since one year, change in voice since 9 months and dysphagia since 9 months. Patient was diagnosed to be a case of antrochoanal polyp in left nose which is extending in oropharynx and a large cystic mass is seen in the oral cavity which is pushing the uvula and soft palate down. The lower limit of mass cannot be visualised in the oral cavity. CT scan and contrast X ray neck showed that the lower end of the polyp was reaching up to the epiglottis. Patient was planned for endoscopic removal of the polyp. We decided to give general anaesthesia to the patient. Patient was premedicated with oral ranitidine in the night before surgery and one hour prior to surgery. No sedative premedication was given to avoid airway obstruction. Standard ASA monitors were attached and intravenous access was secured. Inj. Glycopyrrolate and inj. Ondansetron was given. Preparation for emergency surgical airway was done.

After preoxygenation, patient was induced with Propofol and a well lubricated Guedel's oropharyngeal airway was gently inserted. After confirmation of adequate ventilation, inj. Succinylcholine was given and patient's trachea was intubated by direct laryngoscopy. Oropharyngeal packing was done. Anaesthesia was maintained using nitrous, oxygen and isoflurane. Muscle relaxation was achieved with inj. Vecuronium. Inj. Fentanyl was given to supplement analgesia. The polyp was removed in Toto. At the end of surgery, muscle relaxation was reversed with inj. Neostigmine and inj. Glycopyrrolate. Patient was extubated

after complete reversal and patient fully awake. Patient was shifted to post operative ward. The post operative period was uneventful and patient recovered completely and her symptoms were relieved.



3. Discussion

Our patient had uncommon presentation of antrochoanal polyp i.e. change in voice and dysphagia beside nasal blockade. These symptoms warned us of possible pharyngeal extension of the polyp but the patient did not have symptom of obstructive sleep apnoea which is surprising. FESS can be done under local or general anaesthesia.[3] Due to large size of polyp, general anaesthesia was given to the patient to avoid airway obstruction and aspiration. The anaesthetic challenge in this case was difficult ventilation and possible difficult intubation. There was a chance of bleeding from the polyp during intubation. Fiberoptic laryngoscope was kept ready in the operation theatre and placement of supraglottic airway was not possible due to obvious reason. Therefore, we decide to intubate the patient by direct laryngoscopy. We asked the surgeon to be ready for emergency cricothyroidotomy/ tracheostomy. After induction, patient's airway got obstructed but obstruction was relieved by oropharyngeal airway. However, insertion of airway can lead to bleeding from the polyp which can make the situation even worse. So, insertion of airway should be very gentle and suction should be kept ready to suck blood. Direct laryngoscopy revealed Cormack and Lehane grade I view and intubation was not problematic in this patient as lifting action of direct laryngoscope moved the larynx away from the polyp. But the laryngoscopy and intubation would have been difficult if the polyp was not moved away from the glottis. We were prepared for emergency surgical airway in case we lose ventilation. These patients may present with sudden onset stridor and laryngeal obstruction and may require emergency airway control and surgery.[4][5]

The contrast X ray neck and CT scan were very helpful in this case and we recommend them in patients of antrochoanal polyp presenting with obstructive sleep apnoea, change in voice, dysphagia and respiratory obstruction.

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