An Unusual Presentation of Impacted Foreign-Body in the Adult Larynx

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Abstract Foreign-bodies in the aero-digestive tract are a frequent occurrence in ENT practice. The diagnosis and management are based on clinico-radiological findings. We report a case of a 50 paise coin impacted in the adult larynx where the patient came to us 3 days later with the symptom of change of voice and pain in the throat but, surprisingly no dyspnoea or stridor.

Keywords Foreign-body · Larynx

Introduction

Various types of foreign-bodies have been reported in the aero-digestive tract in literature. These have always posed a challenge to the ENT surgeon when impacted in the air passage especially in children since their airway lumen is very narrow, thus making instrumentation difficult. Even though it is not unusual to find a foreign-body impacted in the larynx in an adult patient, it is almost impossible to see a patient who presents 3 days after aspiration of a coin with the symptom of 'change in voice' and sore-throat and absolutely no evidence of dyspnoea or stridor.

Case-Report

A forty-seven year old male came to our Out-Patient-Department with a history of 'change in voice', and pain in the throat since 3 days. He gave a history of swallowing a 50 paise coin which was held in his mouth while talking on the phone. This was followed by some violent coughing, change in his voice and pain in the throat.

He immediately went to his family physician who treated him for pharyngitis, attributing his change in voice to the same infection which afflicted his pharynx. The patient came to the hospital when there was no relief in his 'change of voice' despite taking medication for 3 days.

On examination of the oral cavity, there was no evidence of pharyngitis.

Examination of the larynx using a 70° Hopkins telescope in the OPD revealed the presence of a coin in the subglottis lodged in an antero-posterior direction with oedema of the vocal folds (Fig. 1). Surprisingly, the patient was extremely comfortable breathing through this narrowed glottis!!

He was admitted urgently and X-rays of the neck (AP and lateral views) were taken which confirmed the presence and position of the foreign-body (Fig. 2). The patient was explained that an elective tracheotomy would be performed prior to any attempt at removal since this would perform the dual function of securing the airway as well as helping in preventing any post-operative catastrophe due to exacerbation of the already existing oedema of the glottis and subglottis following manipulation during removal of the coin.

Following an elective tracheotomy, the airway was secured and the coin (Fig. 3) was removed by gentle manipulation using a direct laryngoscope under general anaesthesia. The glottis and subglottis showed evidence of inflammation and

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Fig. 1 The coin as seen on rigid Hopkin's telescopic examination

Fig. 3 The 50p coin after removal

Fig. 2 Digital X-ray of the neck antero-posterior and lateral views confirming the position (lie) and site (subglottic) of the coin in situ

oedema. He was given a course of antibiotics with a short course of systemic steroids post-operatively.

The post-operative recovery was uneventful and the patient was decannulated on the third post-operative day.

Discussion

The larynx is not a common site of foreign-body impaction since, a foreign-body lodged at this site is either coughed out or moves down into the tracheobronchial tree [1]. Foreign-bodies in the aero-digestive tract are found

more in children than in adults. A foreign-body is defined as an object or a substance foreign to the location where it is found. A variety of foreign-bodies have been reported in literature ranging from nuts, seeds, teeth, erasers, pencils, safety-pins, tack pins, whistles, tracheotomy tubes etc. Subglottic foreign-bodies are however associated with high mortality due to total airway obstruction and hypoxia [2]. The severity of the symptoms depends on the size, site, composition and duration for which the foreign-body is present in situ. At times, it may be life threatening like in our case, and warrant prompt and judicious management.

Foreign-bodies in the ear, nose, throat or larynx can be deceptive, in that they seem so easily accessible that in the haste to remove them, one may push them further inside resulting in worsening the situation. Specifically, subglottic foreign-bodies present unique clinical challenges; their diagnosis is often difficult as they are commonly confused with other causes of upper airway obstruction [3]. On very rare occasions, loss of voice may be the sole symptom of subglottic foreign-body aspiration [4] as is also seen in our patient.

It is important to follow the dictum of never attempting to remove the foreign-body without first confirming and documenting its presence and then making sure that one has proper illumination, instrumentation and expertise to successfully remove it. A lack of these and undue haste may sometimes prove to be fatal!

Conclusion

Foreign-body aspiration is a preventable mishap and can be prevented by educating the society, especially parents.

Also, it is equally important to educate the medical fraternity to aid in early diagnosis and prompt removal, thus preventing a potentially fatal outcome.

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