

IMPACTION OF DURIAN SEED IN THE LARYNX

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Case report

ABSTRACT

Common foreign bodies in adults include fish bones and improperly chewed meat. A 72-year-old Malay gentleman was brought in by his son to the emergency department after he

was seen gasping at home. The patient has an underlying history of stroke with neurological deficit include his gag reflex. According to family members, the patient had the symptom a day after he had allegedly consumed a piece of durian without removing its seed. Patient

was then admitted to Intensive care Unit (ICU) for monitoring. His blood gas normalized and was extubated after 2 days in ICU before discharged home the next day.

Key words: larynx, Durian seed.

1. INTRODUCTION

A 72-year-old Malay gentleman was brought in by his son to the emergency department after he was seen gasping at home. The patient has an underlying history of stroke with neurological deficit include his gag reflex.

According to family members, the patient had the symptom a day after he had allegedly consumed a piece of durian without removing its seed. Patient arrived at the emergency department gasping with SPO₂ of 88% under the room air, reduced air entry on both side of the lungs and arterial blood gases showed respiratory acidosis (pH: 7.033, pCO₂: 72.7). The patient went unconscious and active resuscitation was done. Upon attempt intubation, we noted a durian seed lying across the larynx.

It was in the supraglottic region, obscuring the view of vocal cords. The durian seed was approximately 2 inches in length with a diameter of 1 inch (Figure 1). We successfully removed of the durian seed using a Magill's forceps (Figure 2) with visual aid from the C-Mac video laryngoscope. Patient was then admitted to Intensive care Unit (ICU) for monitoring. His blood gas normalized and was extubated after 2 days in ICU before discharged home the next day.

2. CASE REPORT, DISCUSSION AND CONCLUSION

Common foreign bodies in adults include fish bones and improperly chewed meat. Durian seed (*Durio spp*) also though extremely uncommon foreign body has been reported to be dislodged in the small bowel and the imaging presentation may mimics gallstone ileus on computed tomography (1).

The protective function of larynx plays vital role in preventing foreign body penetration into the airway during the second phase act of swallowing. It includes closure of laryngeal inlet by backward tilt of epiglottis, approximation of true vocal cords and cough reflex. These mechanisms require an important neural integrity. Premorbid cerebrovascular accident had made the patient to have high risk of aspiration. This is the worse scenario in which the airway penetration is by a big object as far as the diameter of an adult larynx is concerned. Durian is a thorn-covered husk with



Figure 1. Removed durian seed measuring 2.5 inch (about 6 cm) in length



Figure 2. Magill's forceps used to remove the seed from the obstructed airway

yellow fleshy ovoid seed is popularly consumed in South East Asia (2). Each durian may contain 10-20 seeds each weighing approximately 20 g.¹

Owing to the size of an average seed, the entrance of durian seed may lead to near complete shut down of the airway and the patient can succumb to asphyxia and death within minutes. On the other hand, the size of the seed did not permit lower site dislodgement which can predispose to difficult removal and lung collapse.

The typical symptoms of choking and gasping were seen in this patient has lead to a suspicious of a foreign body at the upper airway by the relatives. The usage of Magill's forceps

helps to get a grip on the slippery surface of the seed. C-Mac laryngoscope was used as it is more effective in securing patient with difficult airway (3). In addition, the durian seed was readily visualized and fast and effective retrieval of the seed can be achieved.

Conflict of interest: none declared.

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