Case Report

An unusual case of Ayurvedic tablet as foreign body cricopharynx

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ABSTRACT

A cricopharyngeal foreign body is a common emergency to any otolaryngologist in their clinical practice. Coins, button batteries, pencil tips, screws, tooth brush, safety pin are usually found in children but are rarely seen in adults in the cricopharynx. We present an unusual case of ayurvedic tablet as a foreign body in a 40-year-old female who swallowed an Ayurvedic tablet. She complained of absolute dysphagia to both solids and liquids. Such tablets are usually radiolucent and are not visualised on routine radiographs. Unexpectedly, on the X-ray lateral view of the neck, cricopharynx area showed a circular radio opaque shadow. Foreign body was removed by hypopharyngoscopy and patient was discharged with no complaints. Ayurvedic tablet as radio opaque shadow is a rare presentation and only one similar case has been reported so far.

Keywords: Foreign body cricopharynx, Ayurvedic tablet, Radio opaque

INTRODUCTION

Swallowing is initiated when oral contents come into contact of back of the tongue and are propelled backward into the pharynx.1 Mostly foreign bodies are stucked at sites of narrowing in the oesophagus. These are usually at 15 and 25 centimetres, but the reason for impaction at these levels may be due to patterns of motility of upper esophagus rather than its anatomy.2 A high pressure zone is formed in between pharynx and cervical esophagus which is known as the upper oesophageal sphincter (UES). Physiologically this sphincter has protective action against both reflux of food and air into digestive tract.3 In this case, the Ayurveda tablet was successfully removed from the cricopharynx by rigid hypopharyngoscopy under general anaesthesia. If such a foreign body cricopharynx is not managed on time, oedema and erosion can lead to difficulty in swallowing, which may increase the morbidity and mortality of the patient.

CASE REPORT

A 40-year-old female came to the emergency department of Kalra Multi Speciality hospital, Ludhiana with difficulty in swallowing to both solids and liquids since 6 hrs. The patient had immediate regurgitation on taking liquids even. Detailed history of the patient revealed that she was on some sort of ayurvedic medication for chronic hypertension. She had consumed the tablet early morning which was roughly 2 cm in diameter and was spherical in shape. She visited local doctors and was referred to our hospital. On initial examination in the emergency ward she had drooling of saliva; the oxygen saturation was between 80% to 90%. While performing routine evaluation of larynx by indirect laryngoscopy, we found pooling of saliva in bilateral pyriform fossa. X-ray neck lateral view was performed. We were surprised when it revealed a radiopaque spherical shadow at the lower level of cricopharynx (Figure 1). Suspecting that this tablet may have contained a metallic substance which could cause erosion on long standing, rigid
hypopharyngoscopy was planned under general anaesthesia. The pill was visualised in lower border of the cricopharynx as spherical black foreign body. The surrounding area was Normal and no edema was seen. With the help of an esophageal foreign body removal forceps, the tablet was removed. On gross appearance, the pill was 2 cm in size and hard in consistency.

**Figure 1: Horizontal arrow shows the foreign body (tablet) in cricopharynx at C6-C7 level.**

Post-operative period was uneventful and patient was kept on liquid diet for one day. Semi-solid diet was started next post-operative day. Patient was discharged on 3rd day on normal diet, with no complaints.

**DISCUSSION**

A foreign body wedged in the cricopharynx can cause damage to the airway and local injury to upper end of oesophagus. Children tend to swallow dangerous objects such as coins, button batteries, pencil tips, screws, tooth brush, safety pin which can cause complications. The oesophageal foreign bodies are more common in children and some kind of adults having psychiatric illness. At least one foreign body would have been ingested by most of the individuals at least once in their lifetime.7

The visualisation of the pharynx/hypopharynx by indirect laryngoscopic is sometimes difficult as patient is anxious and also because of pooling of saliva in the bilateral pyriform fossae. Pain or regurgitation while drinking or the absence of crepitus on moving of cricoid on vertebra in a side-to-side motion (laryngeal crepitus) suggests the presence of a foreign body.8 Early removal of such a foreign body wedged at cricopharyngeal sphincter is necessary to decrease the morbidity and hospital stay.9 Traditional medicine systems such as ayurveda and unani are practiced in India since ages as alternative medicine. Ayurveda is combination of two words, Ayus meaning longevity and Veda is related to science. According to reports, one out of five traditional herbal medicine products in south Asia contain potentially detrimental metallic contents such as mercury, lead and arsenic.10 Mercury is used in India by traditional practitioners of Ayurveda, siddha and unani medicine. Especially in Ayurveda, mercury preparations are obtained from burnt metal and mixture of herbs in the form of bhasm.

In this case, the pill got wedged in the cricopharynx owing to its irregular shape and size. The case was managed successfully in the emergency operation theatre without encountering any complications. Several cases of foreign body cricopharynx of tablets along with blister packaging have been reported in literature, but an ayurvedic herbal medicine tablet causing absolute dysphagia and being diagnosed as radio opaque shadow on X-ray is a rare clinical presentation. The present case highlights the importance of clinical history and radiographic examination in case of foreign body cricopharynx. Radiographs can be helpful even if clinician suspects the foreign body to be radiolucent as experienced by us in this case. Otolaryngologist should not wait for the tablet to dissolve by itself as metallic content could cause more harm such as erosion/edema in wait and watch policy. Its immediate removal is necessary by hypopharyngoscopy.

**CONCLUSION**

Patients taking ayurvedic medicines of irregular shape and consistencies should take these tablets by cutting them in smaller bits before being swallowed and traditional healers should be educated regarding the risk associated with mercury or arsenic ingestion so that future occurrence of such cases can be prevented. Ayurvedic tablet as radio opaque shadow in cricopharynx is a rare presentation and only 1 similar case has been reported so far. This shows the important value of radiographs in managing a case of suspected foreign bodies lodged in cricopharynx.

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