Case Report

A rare case presentation of foreign body in Esophagus (large mango seed)

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Fish bones, meat bones, coins are common foreign bodies in the throat encountered by Otolaryngologist in their day to day practice, but a large mango seed as a foreign body in the pharynx is rarest of the rare. We report a case where a whole large mango seed accidentally entered the throat of a 70-year-old male, where it became lodged causing throat pain, dysphagia and respiratory distress due to pressure effect over the trachea. The mango seed was removed as an emergency procedure.

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Foreign body impaction in upper aero digestive tract frequently encountered in Otolaryngological practice. Various kinds of foreign body impactions have been reported of which coins, buttons, batteries and metal artifacts are commonly encountered foreign bodies in the pediatric age group, while dentures and bones are more common in adults. Accidental impaction of a large mango seed is a very rare foreign body to be encountered by the Otolaryngologist. We report one such rare case of accidental large mango seed impaction in the pharynx with its presentation and complications. From the review of literature we have come across two similar case reports and we report this as most unusual case of foreign body in an adult.

Case Report

A 70 year old man presented to the casualty department of MGM Medical College & LSK Hospital, Kishanganj on 12-06-2013 with history of accidental ingestion of a large mango seed 4 hrs back followed by severe pain, complete inability to swallow food or water and increasing respiratory distress.

Examinations — A hard foreign body could be palpated in the left side of neck. The mango seed was transversely impacted. On indirect laryngoscopy- there was pooling of saliva in left pyriform fossa. Patient was immediately taken to emergency operation theatre and general anesthesia was administered. On introducing the rigid esophagoscope a foreign body could be located in the left pyriform sinus lying transversely. The foreign body was firmly impacted. With conventional foreign body forceps, the foreign body could not be taken out. The anesthetist was asked to increase the dose of muscle relaxant which helped to rotate the foreign body manually by putting pressure on left side of the neck externally. The foreign body was realigned along the long axis of pharynx. Then from below upwards it was pushed manually from outside. With the gradual manipulation, this large foreign body could be disimpacted in the hypo pharynx. Esophagoscope was withdrawn & the foreign body could be taken out with the help of anesthetic laryngoscope & Magill's forceps. On removal, this foreign body was found to be a large mango seed measuring - 7cm x 4cm. Thorough suction of the pharynx was done to remove any residual debris. Minor abrasions was noted over the pharyngeal mucosa. The endotracheal tube was withdrawn after reversal of anaesthesia. The patient was immediately placed in left lateral position and ventilated with 100% oxygen with mask for five minutes. Patient was further observed for ten minutes for any stridor and then shifted to the ward. A post extraction X-ray soft tissue neck lateral view showed normal pharyngeal contour without any parapharyngeal gas shadow (Fig 1). Patient was free of symptoms and was then given oral liquids which he could swallow with slight discomfort, oral analgesics and a prophylactic antibiotic course was given and patient was discharged the following day.

The case was a challenging one because it was an unusual presentation of an unusual foreign body (Fig 2). So in this kind of situation innovation and resourcefulness of surgeon & anesthetist are of paramount importance. A thorough search of the medical literature was done by us and we came across two reported articles of mango seed impaction and such an unusual foreign body is thus being reported

Fig 1 — X-ray soft tissue neck lateral view showing a shadow in front of c4-c6 vertebra

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Fig 2 — Intra-op picture of the patient following induction of general anesthesia for removal of the foreign body

for its rarity with advice on preventive measures (Fig 3).

Prior to submitting this paper for publication, approval of the ethical committee was duly obtained from the institution authority.

Discussion

Foreign body impaction is a commonly encountered ailment in otolaryngological practice. Historically foreign impaction have been reported in mummies. In ancient India around 6th century BC among the various practices of pursuit of death by the Ajivika monks to achieve salvation one such practice was voluntary choking oneself by ingesting mango seed (Barua).

Accidental foreign body ingestion is a common occurrence in the pediatric age group but is also seen in the edentulous elderly subjects who report with various kinds of foreign bodies like denture impaction, meat balls, meat bones and large food bolus. Masood and Irshad in their series of 186 cases reported an incidence of 16.67% of foreign body impaction in the elderly age group. Foreign bodies are most frequently encountered in the pediatric age group in whom coins are most common objects ingested accidentally. Seeds are more frequently reported as tracheobronchial foreign bodies in pediatric age group (Endican S). Mango seed impaction in the pharynx was reported by Masood *et al* Sajid *et al* in their study of 50 pharyngoesophageal foreign bodies reported another case of mango seed impaction.

Metallic foreign bodies like coins, metal artifacts and toys are most common types of foreign bodies that are seen in the pediatric age group worldwide. Multiple foreign bodies (coins) have been reported by Isser and unusual metallic foreign bodies like wrist watch dial, toy key and metallic end of ball point pen were reported by Jagade. Sarkar *et al* reported maximum incidence of foreign bodies in throat of which coins, ear rings, chains, were reported fish bones being commonest from a report of foreign bodies from a teaching hospital in Eastern India. Koempel and Hollinger reported an incidence of 84% incidence of foreign bodies in children under 5 years of age the cause being attributed to the curiosity of child to explore the surrounding world with their mouth and also to poorly developed swallowing muscles and posterior dentition. History of foreign body impaction was present in all cases and most patients presented early for symptoms to the hospital with few exceptions

Fig 3 — Mango seed being removed from esophagus

of asymptomatic cases who after few choking and coughing bouts remained largely asymptomatic hence did not seek immediate medical advice. Incidence of foreign body impaction was more in males from rural population. The most common site of impaction was at cricopharyngeal junction, dysphagia being the most common symptom (Masood *et al*), followed by chocking and cough bouts, neck pain and tenderness. Koempel *et al* reported that despite advances in prevention, first aid techniques and advanced anesthesia incidence of foreign body impaction still remain a diagnostic and therapeutic challenge especially in the pediatric age group and the early suspicion and prompt diagnosis remains the key to successful management of these cases. Sumanta K dutta reported a case of growth retardation due to long retained foreign body in the oesophagus in an 8 years old child which was removed by thoracotomy.

Radiographs of the neck and chest often show radio opaque foreign bodies like metallic objects and meat bones, meat balls often show on the skiagram as vague opacities with surrounding air shadow. Negative radiological evidence is not a reliable diagnostic aid and positive history of foreign body along with persistent symptoms are strong indicators for suspicion and endoscopy must be done in these patients to conform the diagnosis.

Rigid endoscopy can lead to iatrogenic trauma in patients while foreign body extraction especially in old retained foreign bodies with surrounding luminal wall inflammation. Proper anesthesia and muscular relaxation and use of appropriate grasping forceps is of paramount importance in successful atraumatic removal of foreign bodies.

Sajid *et al* reported one case of mango seed impaction in post cricoids area in an edentulous elderly male with dysphagia and respiratory distress which could be removed successfully.

In our case the patient was an elderly edentulous male patient coming from rural area who had accidental impaction of mango seed in the pyriform sinus with chocking episodes and dysphagia and progressive respiratory distress. The case was managed successfully due to early presentation and prompt surgical intervention in the emergency operation theatre without any loss of time for radiological investigations. Preventive measures in these type of cases need to discourage the rampant common rural practice of joyfully sucking ripe mangoes during summer (a season for mangoes in this part of continent) frequently churning out the juice by gobbling the whole fruit in the mouth which hazards such accidental ingestion of mango seed.

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permitting us to use hospital records for publication of this case report.

Conflict of Interest : The authors declare that there is no conflict of interests regarding the publication of this paper

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