

# A Rare Case Report of a Whole Fish Removal from Oropharynx

Krishna Arpita Sahoo\*, Subrat Kumar Behera

ENT Department, SCB Medical College, Cuttack, India

\*Corresponding author: drkrishna52@gmail.com

**Abstract** Accidental impaction of a live fish is very uncommon in Oropharynx. Sometimes the impaction of foreign body may be life threatening and requires immediate removal. We report a case where a whole fish accidentally impacted in the oropharynx of a 40-year-old male causing throat pain and dysphagia. Successful removal was done as an emergency procedure.

**Keywords:** whole fish in oropharynx, foreign body removal, endoscopy

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## 1. Introduction

A variety of foreign bodies lodging in upper aerodigestive tract is common in otolaryngology practices. Accidental ingestion of foreign bodies and their impaction is common among children which includes coins, marbles, buttons, safety pins and batteries, whereas in adults common foreign bodies are bones, dentures, and metallic wire. [1] Fish bones rather than live fish are very common foreign bodies seen usually in the adult age group. A live fish is a rare foreign body in the adult age group that has been reported with varied presentation and complications. Accidental ingestion and pharyngeal lodging of a whole fish usually occurs while catching fish in water bodies. [2] A living foreign body can cause mucosal injury due to its movement and secretions. Here we present the first case of accidental swallowing of a live fish ("koi fish" - *Cyprinus carpio*) and its impaction in the vallecula of a man who was bathing in a pond, making it a very unusual foreign body of the throat.

## 2. Case Report

A 40-year-old healthy male, without any significant past medical history presented to our casualty department complaining of accidental entry of a live fish into his throat while bathing in a pond. He developed bouts of cough, choking sensation and oral bleeding which rapidly progressed with throat pain, difficulty in swallowing and breathing. On examination, he was restless, anxious, dysphasic, and typically placing his hands in front of his neck (Figure 1). Tachycardia and tachypnea was present with a respiratory rate of 50/min and room air saturation of 80%. High-flow oxygen inhalation was administered immediately by a non-rebreathing mask along with

intravenous fluids and antibiotics. The chest examination revealed trachea to be in the midline but there was mild suprasternal retraction and use of accessory muscles of respiration. Air entry was also decreased on bilateral side over chest but there was no obvious stridor. The rest of the systemic examination was unremarkable. Based on history and presentation, a foreign body in the pharynx was suspected. Oral cavity inspection revealed a part of the body of fish. X-ray of the tissues of the neck –PA and lateral views showed a 12 cm long fish was present in oropharynx in a horizontal position (Figure 2). Controlled fiberoptic examination of nasopharynx and oropharynx revealed whole fish impacted in vallecula. The patient was immediately taken to the operating room for an emergency foreign body removal under anaesthesia. Direct laryngoscopy revealed the presence of a 12 cm size fish impacted horizontally in the vallecula with head facing to the right lateral pharyngeal wall and tail facing the left lateral pharyngeal wall (Figure 3). Emergency Tracheostomy was avoided luckily. Magill's forceps was passed trans-orally to grasp the head of the fish and the whole fish was successfully removed (Figure 4).



Figure 1. Pre-operative view of the patient



Figure 2. Radiopaque shadow of whole fish



Figure 3. Endoscopic view of the whole fish



Figure 4. Koi fish removed from oropharynx

Once the offending foreign body was removed, a check examination was done to rule out any residue of the fish or any mucosal injuries. The intra-operative and post-operative period was uneventful. Ryle's tube was placed and IV antibiotics, steroids and fluids were given. Patient was completely symptom free and had no complications on 3<sup>rd</sup> post-operative day and then he was discharged. Follow-up was uneventful.

### 3. Discussion

Foreign body in the throat is a commonly encountered problem in an emergency department which has to be dealt with swiftly. Foreign bodies lodged in the upper aero-digestive tract are classified as exogenous and endogenous and as traumatic and a traumatic. The incidence of foreign bodies is the highest in the age group of 6 months to 6 years and higher in boys compared to girls. In 80% of the cases commonest site for impaction is cricopharynx. [3] A complete live fish in the aerodigestive tract is a rare finding. The frequent presenting complaints are throat pain and discomfort, dysphagia, respiratory distress, and bouts of cough and vomitus mixed with blood. [4,5] In many countries fishermen often kill fish by crushing the head between teeth or hold the fish between their teeth to keep both hands free to catch the next one, while gathering fishes from the net. But sometimes struggling fish slips into mouth and lodges in the pharynx, oesophagus, larynx or tracheobronchial tree. Final destination of a live foreign body depends on the size, shape and initial presentation of impaction in the airway. Large, irregular shape fish occupying in the oropharynx, hypopharynx produces less initial severe respiratory symptoms. [6] Flat and smaller foreign body may lodge in the upper trachea and bronchus causes increase in respiratory distress in course of time. Especially if the live fish initially impacts in the inlet of larynx or trachea death is sometimes inevitable even before transfer the patient to the hospital. The active oral bleeding is caused by the lacerations caused by the sharp bones of the fish. [6,7] The lie of the fish in the upper oesophagus is responsible for the respiratory symptoms. The overall incidence of complications associated with foreign bodies of the pharynx, larynx and oesophagus is around 7.6%. [7] A complete physical examination and resuscitation are necessary in the initial management. Tracheostomy may be required if stridor is present. Radiographs are important clinical adjuncts in the identification of swallowed foreign bodies regarding its size and shape especially in radio opaque type. Rigid endoscopic removal of foreign body is safe and effective. Aggarwal *et al* [6,8] reported success in removal of impact fish from the hypopharynx of the infant of the fisherman's family under general anaesthesia. Subramanian *et al* [9] made an attempt to remove impacted fish by Magill's forceps from diminished sensory perception of the pharynx of an elderly patient without anaesthesia. They concluded that it is easy to remove fish if it enters with tail first in the mouth and difficult to remove due to presence of fins and the slippery nature of the fish and safe method to remove marine foreign bodies are by using Magill's forceps or sponge stick forceps. We used Magill forceps to remove the fish from the throat and followed a technique similar to that used by Vele and Dubey [9] to extract a fish causing nearly complete airway obstruction. Control examination of the oral cavity and pharynx including check endoscopy is mandatory to rule out any foreign body residua and injuries.

### 4. Conclusion

Impaction of swallowed foreign body in the aero-digestive passages will continue to be a problem for

the endoscopist as long as man has to eat to live. Thus, the revival of a patient with a foreign body depends on the speed with which it is recognized and treated.

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