

## Case Report

Live Fish Impaction in Hypopharynx in an Elderly Patient<sup>☆</sup>

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## SUMMARY

Successful removal of a live fish impacted in the hypopharynx of a 65-year-old male is reported to emphasize the importance of the speed with which it has to be recognized and intervened. The present report also highlights the altered sensory perception in the oral cavity of elderly people as a potential risk factor for airway obstruction due to a foreign body. Moreover, the possibility of a foreign body has to be suspected, if an elderly patient without any cardiorespiratory illness presents with an acute onset of progressive respiratory distress.

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## 1. Introduction

Foreign bodies in the airway still remain a diagnostic challenge for emergency physicians, which require rapid recognition and intervention. Foreign body aspiration can lead to death due to acute hypoxia. In this paper, successful removal of a live fish impacted in the hypopharynx of an elderly male is reported so as to highlight the importance of the speed with which a patent airway has to be established. Practitioners should remember that diminished sensory perception in the pharynx is a potential risk factor for airway obstruction as the age advances.

## 2. Case report

A 65-year-old healthy male, without any significant past medical history, was brought to the emergency room with an acute onset of respiratory distress. He had developed bouts of cough and choking sensation while bathing in a lake, which rapidly

progressed to difficulty in breathing, respiratory distress, and inability to speak. The patient and his relatives suspected a foreign body in the throat and made a few failed attempts at retrieving the foreign body. Then he was rushed to a local physician who referred him to our hospital.

On examination, he was restless, agitated, dysphasic, and typically placing his hands in front of his neck. He was cyanotic, tachycardic, dyspneic, and tachypneic, with a respiratory rate of 60/min and room air saturation of 70%. There was an audible inspiratory stridor. High-flow oxygen was administered immediately by a non-rebreathing mask. The chest examination revealed suprasternal retraction, and use of accessory muscles of respiration and trachea was in midline. He had decreased breath sounds and transmitted sounds from the upper airway, scattered wheeze and whispery sounds throughout his chest. The rest of the systemic examination was unremarkable. Based on history and presentation, a foreign body in the pharynx was suspected. In view of impending cardiorespiratory arrest, it was planned to provide ventilator support. Direct laryngoscopy was performed, which revealed the presence of a fish with its tail in the hypopharynx (Fig. 1). The Magill forceps were passed transorally to grasp the body of the fish and the entire fish was successfully removed (Fig. 2). The size of the fish prevented it from entering the trachea or esophagus. He got immediate relief from the distress but had hoarseness in his voice. He was sent home the same day as there were no untoward incidents or complications. Follow-up was uneventful.

<sup>☆</sup> All contributing authors declare no conflict of interest.

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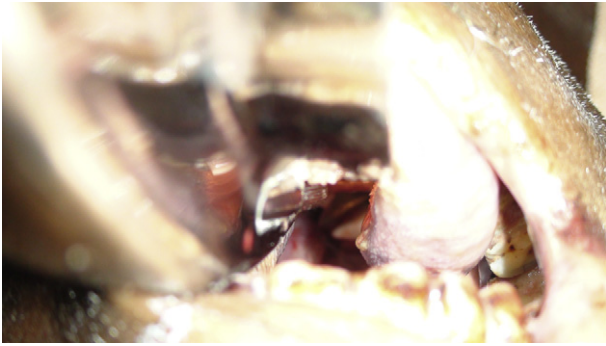


Fig. 1. Impacted fish in hypopharynx.



Fig. 2. Fish removed in Toto from hypopharynx.

### 3. Discussion

Foreign body in the throat is a commonly encountered problem in emergency departments. A variety of foreign bodies in the airway have been reported, among these fish bones being predominant<sup>1</sup>. Foreign bodies can become lodged anywhere in the air passage, depending on their size, shape, and design. A bigger foreign body in the throat may block both the trachea and esophagus, and result in death. An entire live fish in the hypopharynx is rather uncommon and rarely reported. The human airway has been provided with a number of protective mechanisms that protect the laryngeal inlet. There will be an intense spasm of the vocal cords if any object touches these cords and a highly sensitive cough reflex with afferent impulses will be generated which will throw the foreign body out<sup>2</sup>. Despite these protective reflexes, a fish had entered the oral cavity of a man while he was bathing in a lake, as in the present case, probably due to diminution of pharyngeal and supraglottic sensitivity<sup>3</sup>—a manifestation of advancing age. Hence, older individuals should be extremely cautious while bathing in water streams.

Most of the time, the patient succumbs to suffocation before reaching the hospital. There are very few reports of successful occasions in the literature; for example, a fisherman developed upper airway obstruction after accidentally swallowing a fish, which was removed piece by piece<sup>4</sup>. Khan et al<sup>5</sup> removed a live Koi fish that obstructed the airway. We used Magill forceps to remove the fish from the throat and followed a technique similar to that used by Vele and Dubey<sup>6</sup> to extract a fish causing nearly complete airway obstruction. Aggarwal et al<sup>7</sup> reported a failed attempt to remove a live fish from a 7-month-old baby using Magill forceps, which could be due to either the slippery nature of fish or the impaction of lateral fins in the pharynx. It is easy to remove the fish if the tail enters the oral cavity first but is difficult if it is the other way round. It is important to note that recovery of the patient lies in the speed with which the airway is secured. In this clinical scenario, one can also use sponge stick forceps to remove these marine foreign bodies<sup>8</sup>.

Recent literature on foreign bodies in throat<sup>9,10</sup> does not mention live fish in view of its rarity. Moreover, the possibility of a live fish entering the pharynx while bathing in a water stream is extremely rare. Also, the symptoms of suffocation are influenced by foreign body-related factors such as the size, shape, surface, pattern of impact, previous attempts to remove it and/or the local complications induced by it; patient-related factors such as age, size, and dimension of the pharynx/hypopharynx, sensory perception, local

edema, and time interval between aspiration and arrival; and health-care provider-related factors such as handling of the foreign body. If the head of the fish is pointing down into the air passage, the fins and scales get firmly attached to the mucosa, thus making it difficult to remove the fish. In the present case, the fish was successfully removed and the patient was saved.

### 4. Conclusion

We conclude that if elderly patients without a previous history of cardiorespiratory problems develop acute onset of progressive respiratory distress of unknown etiology, the possibility of the presence of a foreign body, which may even be a fish if they develop such symptoms after bathing in a water stream, has to be suspected and attempts have to be made to remove it immediately. More so, primary health-care workers have to be trained well to acquire skills to recognize foreign bodies in the airway and manage them accordingly. Thus, the revival of a patient with a foreign body in the airway depends on the speed with which it is recognized and treated.

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