Case Report

Unusual Foreign Body Aspiration in a 12 Year old Boy

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Abstract
Foreign-body aspiration is a relatively common occurrence in children. A flat, elongated foreign body usually impacts at the oropharynx, hypopharynx or inlet of the larynx. But it may cross the glottis and enter into trachea and bronchus. We report a rare type of long fish in trachea and bronchus, presented as acute respiratory failure requiring invasive mechanical ventilation followed by prompt removal of the foreign body. A 12 years old boy presented with acute respiratory failure following aspiration of a live fish. To relieve respiratory distress and secure life, endotracheal intubation and mechanical ventilation was carried out and through the endotracheal tube fiberoptic bronchoscopy was performed after stabilisation of the patient. By the help of fenestrated cup biopsy forcep, a fish was removed from the left main bronchus with repeated attempts. Fish lodging in the trachea and bronchus is an acute emergency condition. It is very difficult to diagnose and manage because of its presence in critical anatomical location. So a quick short history from accompanying persons is crucial to predicting the site of its lodgement in the airway as well as management plan.

Keywords: Foreign body, Unusual, Fish

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Introduction
Foreign-body aspiration is a relatively common occurrence in children. Usually a foreign body reaching the inlet of larynx is coughed out due to highly sensitive and protective cough reflex. But a flat, elongated foreign body may cross the glottis and enter into trachea and bronchus. It may present as a acute respiratory failure which is life-threatening that requires invasive mechanical ventilation followed by prompt removal of the foreign body. We are reporting a case of fish in left main bronchus in a young boy.

Case Report
A 12 years old boy presented with cough and breathlessness of acute onset. On enquiring parents gave a history of live fish aspiration while the boy was playing with it. Patient had a history of fracture of lower end of right humerus 10days prior to hospitalization. Patient had clinical features of respiratory distress. On auscultation, breath sounds was grossly diminished in left side. Chest x-ray prior to hospitalization was normal. In view of respiratory failure, patient was admitted to Respiratory ICU and put on invasive mechanical ventilation after intubating with a 7mm sized endotracheal tube. In spite of volume control ventilation with FiO2 of 100%, the patient hardly achieved SpO2 of 85%. As the patient did not ventilate properly, fibroptic bronchoscopy was carried out through endotracheal tube and observed right main bronchus intubation. The endotracheal tube was repositioned at 2cm above the carina and gradually SpO2, heart rate and respiratory rate stabilized. A shiny foreign
body was seen blocking the left main bronchus. Due to small working channel of the bronchoscope foreign body removal forceps could not be introduced, the procedure was abandoned as the patient desaturated and waited for the patient to stabilize. As the patient’s oxygen saturation improved the fiberoptic bronchoscope was reintroduced through endotracheal tube, a fenestrated cup biopsy forcep was introduced, the foreign body was caught after repeated attempts and removed along with the scope. Unusual foreign body was found to be a fish grasped at its mouth end (Figure 1).

Figure 1. Fish grasped at its mouth end

The endo-bronchial mucosa on left side was hyperaemic and edematous with narrowing and scope is easily negotiable down. The vitals of the patient gradually stabilized after bronchoscopic removal of the fish and breath sounds on left side improved.

Next day morning, patient became tachypneic associated with tachycardia and increase in FiO2 requirement and decreased breath sounds on right side. Portable Chest x-ray revealed pneumothorax on right side with deep sulcus sign and multilobar pneumonia. Immediately 24 size chest drain was inserted on right side under local lignocaine infiltration. Hemodynamics of the patient improved, and on next day patient was extubated. Patient was stabilized in ICU and shifted to ward. Chest drain was removed after 5 days and pneumonia gradually resolved. Patient was discharged after 9 days of hospitalization.

Conclusion

In emergency conditions and during odd hours, fibreoptic bronchoscopy under mechanical ventilation with usual accessories may help to remove the foreign body and helps in ventilating patient resulting in saving of life.

References


