



## Successful Management of an Esophageal Foreign Body with a Rigid Bronchoscopy

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*Ingestion of a sharp foreign object can lead to esophageal hemorrhage and perforation, which is related to high morbidity and mortality. To avoid such complications, early and adequate therapeutic management of these cases is crucial. Herein, we would like to present two cases of esophageal foreign bodies that were successfully managed with rigid bronchoscopy after failed attempts with upper gastrointestinal endoscopic intervention.*

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### **Successful Management of an Esophageal Foreign Body with a Rigid Bronchoscope**

Ingestion of a sharp foreign object can lead to esophageal hemorrhage and perforation, which is related to high morbidity and mortality. To avoid such complications, early and adequate therapeutic management of these cases is crucial. Endoscopy procedures are frequently performed in these patients, and a high proportion of patients with foreign bodies require endoscopic intervention [1-4]. Most cases of foreign-body ingestion occur in the pediatric population, with a peak incidence at ages between 6 months and 6 years [5] Among adults, it occurs mainly in people with psychiatric disorders, mentally challenged individuals, or impairment caused by alcohol, pica, and those seeking some secondary gain with access to a medical facility [6,7]

Herein, we would like to present two cases of esophageal foreign bodies that were successfully managed with rigid bronchoscopy after failed attempts with upper gastrointestinal endoscopic intervention.

Two female patients, aged 48 and 53 years, were admitted to our hospital separately following chicken bone ingestion within a 3 month period. Both of the women developed pain in the throat after eating traditional Turkish food that included chicken. After admission, flexible esophagoscopy was performed that revealed a chicken bone lying transversely in the esophagus with possible mucosal involvement. Endoscopic extraction attempts with flexible esophagoscopy resulted in failure. Because our rigid esophagoscopy device was out of order for technical reasons, both of the patients consulted with the thoracic surgery department. Rigid bronchoscopy under general anesthesia was successfully applied by the surgery team and both of the patients were discharged from the hospital with complete recovery.

The best method for extracting a foreign body from the esophagus is a controversial issue, and several techniques have been proposed for endoscopic extraction [3] After the advent of flexible esophagoscopy, rigid esophagoscopy has fallen almost completely out of use. But the need for a rigid esophagoscopy still exists, especially for foreign bodies lodged at the level of the pharynx and cricopharyngeus muscle, mostly when objects are large and sharp or penetrating [8]. Although rigid esophagoscopy for upper esophageal foreign bodies has an esophageal or pharyngeal perforation risk of 0.34%, with success rates varying between 94% to 100% [9,10], sometimes it cannot be applied, as in our case. For this reason, an alternative

method, such as rigid bronchoscopy, is of great importance for saving the patient from a risky operation.

Current indications for rigid bronchoscopes include examination and management of obstructive airway lesions, sample taking from endobronchial lesions and retrieval of foreign bodies from the respiratory system. Although esophageal foreign body extraction with bronchoscopy is one of the choices in the management of these patients, there are a few reports in the literature that report successful bronchoscopic foreign body extraction from the esophagus [3,11]. Based on this limited data, we decided to extract chicken bones from the esophagus in both of these patients by bronchoscopic intervention, which resulted in great success.

In conclusion, management of esophageal foreign bodies by bronchoscopic intervention compared to standard esophagoscopy is a safe and simply applicable method. However, we also believe that this technique must be performed only by experts in the use of this instrument. Further randomized controlled studies are needed before any definitive judgment can be made on the efficacy of bronchoscopic applications in this setting.

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