

**USE OF FOLEYS CATHETER IN THE REMOVAL OF UPPER ESOPHAGEAL
FOREIGN BODY (COIN)*****Dr. Saiprasad Onkareshwar Kavthekar**Associate Professor, Department of Pediatrics, D.Y. Patil Medical College and Hospital, Kolhapur (416006),
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ABSTRACT

Foreign bodies in the esophagus are common in the pediatric age group and coins account for majority. Diagnosis is not difficult but removal presents problems. Rigid esophagoscopy under general anesthesia remains the standard practice for the removal of esophageal foreign body. Although alternative methods like use of Foley's catheter has been advocated for the removal of smooth objects in the uncomplicated settings. Here I report a case of successful removal of coin from upper esophagus in a 6 years boy by Foley's catheter without fluoroscopic guidance or general anesthesia as an OPD procedure.

KEYWORDS: Esophagus, Foreign body, Foley catheter.**INTRODUCTION**

Foreign bodies (FB) in the esophagus are common in the pediatric age group and coins account for majority.^[1,2,3] Children especially younger ones, are more prone to accidental ingestion of FB because of childish curiosity, incomplete dentition, incomplete development of the neuromuscular mechanisms of swallowing and airway protection, inefficient chewing and lack of attention from caregivers.^[4,5] In most cases, esophageal FB is an urgent medical scenario. Diagnosis is not difficult but removal presents problems. Several methods are in regular use for the removal of coins lodged in the esophagus namely rigid esophagoscopy under general anesthesia, flexible esophagoscopy, use of Magill's forceps, Foley's catheter technique under fluoroscopy control, and advancement using bouginage into stomach and surgery.^[2,6,7] In fact, the majority of blunt pediatric esophageal FB can be removed by a nonoperative Foley catheter removal.^[8,9] Here I report a case of successful removal of coin from upper esophagus in a 6 years boy by Foley's catheter without fluoroscopic guidance or general anesthesia as an Out Patient Department (OPD) procedure.

CASE REPORT

6 years boy presented in the OPD at Department of Pediatrics at D.Y. Patil Hospital Kolhapur with H/O accidental ingestion of 5 Rupees Indian Coin 2 hours back. He had dysphagia, 5 episodes of vomiting and discomfort on sternal region. His clinical examination showed normal throat examination. He was afebrile, pulse rate 100/min, B.P 100/70mmof Hg and respiratory rate of 20 breaths/min. On respiratory system examination air entry was equal and no any added

sounds. His x-ray Neck with Chest AP view showed circular radio-opaque foreign body of size 1cm by 1 cm at the level of C6-C7 suggestive esophageal FB. After confirming clinical diagnosis, 14 FG Foleys catheter was passed down through right side of nostril by lubricating with 2% Lignocaine jelly in supine position by restraining the child. The Foleys catheter was passed slowly beyond the esophageal FB. The feel of catheter touching to the FB was felt. Then the other end of catheter was dipped in a bowl of water to confirm the Foley's catheter is in esophagus only and not in trachea. The balloon is inflated with 10ml of air by 10cc disposable syringe.

Then child was asked to sit, and Foleys catheter was pulled out slowly. The balloon of catheter touched to the coin with upward force and the coin came out in the oropharynx by traction and spitted out from mouth by child. The catheter was deflated and removed outside. The oral cavity was examined for any evidence of trauma or bleeding. The child was asymptomatic after the procedure and sent home after 2 hours of observation.

DISCUSSION

FB ingestion is a common emergency in children and coins are the most commonly lodged in esophagus and needs urgent removal as serious complications like esophageal abscess, mediastinitis, perforation and fistula can arise in impacted esophageal coins.^[10] Abdurehim Y et al^[8] concluded that Foley Catheter removal of FB can be first choice of treatment for blunt and flat esophageal FB as it has many advantages 1) Easy to perform and learn 2) Safe, complication rate is as low as 0 -2 % except minor complications like oral and nasal bleeding

3) Efficient, success rate 85 – 100 % 4)Rapid, it rarely takes more than 20 mins 5)Having no need for anesthesia and it can prevent anesthesia related complications 6) Can be performed as an OPD procedure.7) Esophageal FB by Foley Catheter is 20 to 50 times cheaper than esophagoscopy under general anesthesia.

However, the main critical concern about the use of Foley's Catheter is because it is performed without direct visualization, carrying certain blindness and can result in esophageal perforation and airway complications of this procedure.^[8] The Largest survey of Pediatric radiologist by Campbell and Condon^[11] included 2500 procedures with only one serious but reversible hypoxic episode. Hawkins^[12] reported a single case of death, caused by aspiration of a coin during Foley Catheter removal but at the same time he also reported five deaths while undergoing esophagoscopy removal of a coin under general anesthesia.

There are certain contraindications for the use of Foley's Catheter technique which include FB ingestion more than 24 hours before intervention or at an unknown earlier time, prior esophageal stricture or surgery, signs and symptoms of marked esophageal obstruction, stridor or compromised respiration.^[13]

CONCLUSION

FB removal by Foley catheter is a safe, effective and cheaper option in county like India which is a developing country where esophagoscopy, fluoroscopy and general anesthesia are available only at higher center. This method can be performed as an OPD procedure and even at primary health care center with minimum amount of training and expertise.

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