

# REMOVAL OF FOREIGN BODIES UPPER END ESOPHAGUS

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## ABSTRACT

**Objective:** To discuss management of foreign body upper end of esophagus and pyriform fossa by simple locally adopted procedure in a periphery hospital.

**Material and Methods:** 25 cases of foreign body upper end of esophagus were managed at D.H.Q Hospital Swabi during 2001 and 2002. The foreign bodies were removed by a simple procedure requiring only Mc Intosch laryngoscope and Mc gills forcep (both are used by anaesthetist). In children foreign body was removed under general anaesthesia while in adults it was removed with the help of 4% xylocain sprayed into oropharynx and hypopharynx.

**Results:** Total cases included in the study were 25. 13 males and 12 females. Age group ranged from 6 months to 70 years. Incidence of foreign body was found more in children and common foreign body found was coin. In adults common foreign body was food bolus.

**Conclusion:** Removal of foreign body upper end of esophagus is possible at a for flung periphery hospital where endoscopic facilities are not available.

**Key words:** Foreign body, Cricopharyngeous and pyriform fossae. Mc gills forcep. Mc Intosch laryngoscope.

## INTRODUCTION

Foreign body ingestion is a common problem according both in children and adults. The estimated annual incidence of foreign body ingestion in United State is 120 per million population with approximately 1500 deaths each year<sup>1,2,3</sup>. Typically two

types of foreign bodies are encountered, True foreign bodies (coin button etc) and food related foreign bodies (bolus, fish bone etc.) Commonest site for esophageal foreign bodies is cricopharyngeus (70%). Next site is where aorta crosses the anteromedial wall of Oesophagus (20%) and the third common site area is gastroesophageal junction (10%)<sup>4,5,6</sup>. Lack of proper instruments and

inadequate facilities of general anaesthesia and on top of all reluctance of the patient or relatives to seek advice/treatment at tertiary level hospitals compels surgeon working at periphery hospital to adapt certain own designed procedures and provide services at all possible risks. To remove foreign body esophagus the common procedures are fiberoptic endoscopy, and rigid endoscopy and less popular technique are catheter removal and bouginization<sup>7,8</sup>. While some people adapt special procedure in accordance with the nature of foreign body.<sup>(9,10,11)</sup>

I adopted a little different procedure according to circumstances and available facilities to remove foreign bodies upper end of Oesophagus and pyriform fossae in 25 cases including both children and adults.

## MATERIAL AND METHODS

25 cases of foreign bodies ingestion, stucked at cricopharyngeus or pyriform fossa were managed at periphery hospital (District Head Quarter Hospital Swabi) during two years period (Jan 2001-Dec 2002)

The age group of patients ranged from six months to seventy years, both sexes included. Presence of foreign body was confirmed either by physical examination (indirect laryngoscopy) or by x-ray, neck and upper chest. In all children foreign body was removed under general anaesthesia. The procedure adapted was that, Before induction of anaesthesia, Mc Intosch laryngoscope Paediatric size), McGill's forcep and suction are to be at hand. The operation table is positioned at comfortable level with head slightly down. Short acting anaesthesia is given through intravenous canula no muscle relaxant given. Mc Intosch with the blade of laryngoscope into mouth holding it in left hand, now and McGill pushing tongue base up and forward along white stretching larynx forward and hence crico-pharyngeus

and pyriform fossae were in view. Now any foreign body present is removed with the help of McGills forcep. If foreign body was not visible then tip of McGills forcep is introduced down the sphincter with its Jaws closed, and then opening it helped to see a few centimeters down the esophagus to search the foreign body. The whole procedure is to be completed with in seconds other wise excessive manipulation will lead to risk of laryngospasm. In two cases the coin had slipped down during anaesthesia and was later on confirmed by x-ray to be lying in the stomach. One child vomited during procedure, however with stand by suction we handled it safely.

In one young boy of 18 years the foreign body was a nail stucked in Right pyriform fossa which was removed with the help of foreign body forcep.

In all old age patients foreign body was removed with the help of local anaesthesia (4% xylocain) sprayed into oropharynx and hypopharynx, and foreign body was removed either with McGills forcep or tonsil holding forcep. After removal of foreign body these cases were referred for diagnostic endoscopy to referral hospital.

## RESULTS

The cases managed included both males and female. 13 males and 12 females. The age group ranged from six month to seventy years. The incidence of foreign body ingestion was more common in children, age group between 4-6 yrs. And the common foreign body found was coin. Food bolus and bone chips were common foreign body in old aged group (table 1). All patients presented with history of ingestion foreign body and difficulty in swallowing. Drooling of saliva was noticed in (20%) cases, neck pain was noticed in two cases (8%) while one presented with vomiting (4%). In all cases foreign bodies were removed safely

## NATURE OF FOREIGN BODY INGESTED

S. No.	Nature of foreign body	Age Group	No. of cases	% age
1	Coin	6 month to 6 yrs.	20	80%
2	Spherical Metallic Body	3 years	1	4%
3	Food Bolus	70 years	1	4%
4	Bone	65 years	2	8%
5	Nail	18 years	1	4%

TABLE - 1

except two cases i.e. one case vomited during the procedure however was handled safely, while in another one foreign body slipped down during induction of anaesthesia and was later on confirmed by X-ray to be lying in stomach.

## DISCUSSION

Foreign body ingestion is a common occurrence and carries significant morbidity and mortality<sup>(16,17,18)</sup> the increased incidence of swallowing foreign bodies in children could be to their natural propensity to gain knowledge by putting things in the mouth, inability to masticate well and inadequate control of deglutition as well as tendency to cry, laugh, or play during eating. The habit of children putting things in mouth makes

them more susceptible to accidental ingestion. The more common foreign body ingested in children is coin,<sup>16,17,18</sup> In old age ingestion of a bolus is common occurrence specially elders who are edentulous who can not chew properly, particularly food like meat and swallow it as a whole. Moreover elderly patient most of the time have an other underlying pathology which needs to be screened<sup>(19,20)</sup>.

Removal of foreign body esophagus is not an easy task it needs proper procedure and skill. In ENT speciality foreign bodies are usually removed under general anaesthesia with the help of Rigid endoscope<sup>21</sup>. As occurrence of foreign body is common in extreme of age and both age groups are sensitive regarding risks of general anaesthesia. The situation is worse at periphery hospitals where on one hand there is lack of specialized personal in the field of anaesthesia and poor safety measures while on other hand non availability of proper equipment and instruments. The compulsion to handle such cases in unfavourable situations is a public need and desire. Majority of people are poor and they even can not pay the cost to reach a proper place. The second cause of reluctance is common man phobia from big hospital as for them the procedure of consultation is very much complicated and frustrating. On top of it, it is very pinching for a qualified & skilled

### CLINICAL PRESENTATION OF PATIENTS WITH FOREIGN BODY ESOPHAGUS OR PYRIFORM FOSSA

S. No.	Clinical Presentation	No. of patients	Percent
1	History of foreign body	25 Cases	100%
2	Difficulty in Swallowing	25 Cases	100%
3	Drooling of Saliva	5 Cases	20%
4	Neck pain	2 Cases	8%
5	Vomiting	One	4%

TABLE - 2

person to refer such patients to a distant institution for a problem which in public mind needs a simple procedure.

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