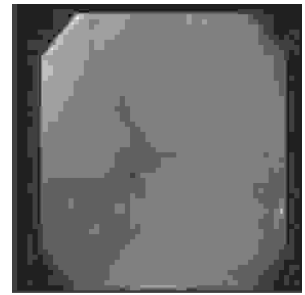


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## FOREIGN BODY IN OESOPHAGUS; ROLE OF PARENTS IN PREVENTION



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**ABSTRACT...** [drmsaleemsh@hotmail.com](mailto:drmsaleemsh@hotmail.com), [drmsaleemsh@yahoo.com](mailto:drmsaleemsh@yahoo.com) **Objectives.** To study the attitude of parents about the coins given to their children, especially about their knowledge of coins that these may become F.B. in oesophagus and can cause an unexpected problem. **Design:** A questionnaire-based survey presented to parents of the children admitted in ENT ward having coin trapped in their oesophagus. **Place and Duration of Study:** ENT Department Bahawal Victoria Hospital, Bahawalpur from July 2004 to June 2005. **Subjects and Methods:** Parents of the children, who were admitted in ENT ward B.V.H, Bahawalpur, were interviewed using a questionnaire proforma focusing especially about the knowledge of parents about coins as a possibility of F Body. Ethical requirements including the administration of written informed consent and provision of confidentiality were ensured. SPSS computer software was used for data management. **Results** In our study 84 out of 100 patients were less than 7 years age. Sixty two were male and 38 were female children. Seventy four of the children were from rural areas. Most of the parents were illiterate and of poor social class. Fifty nine had history less than 1 days and 28 had 1-3 days. Eighty eight patients were operated with one day. Most of the parents (54%) were anxious and worried Thirty five were ashamed while 11% were not bothered. Most of parents pointed out risk factors as easy availability of coin (78%), easy access of coin for children (56%), bad habit of children to put every object in mouth (42%) and lack of knowledge of parents about the risk of coin as foreign body in esophagus (88%). Future commitments of the parents were noted as follows:-restriction of coin for children (60%) education of children (32%) and 8% of parents did not bother about care of children for this. Recommended Suggestion by parents were these Govt. Should ban (92%), role of press and newspaper (62%), role of T.V and radio.(74%), role of health workers to educate people (88%). **Conclusion:** In our setup, most of the parents are illiterate and unaware of the risk that the coin can become a foreign body in esophagus in children. They can be awarded and educated via media like press, television and radio and compaign by health workers. Incidence of these emergency cases can be reduced by these measures to negligible level.

**Key words:** Parents, Coin, Children, Foreign body

## INTRODUCTION

Foreign Body ingestion is a very common phenomenon in human beings especially in children's between the age of 1-4 years. It is a common cause of dysphagia causing mechanical obstruction in the food passage. There is a long list of foreign body materials like coin, food bolus, bone piece, dentures, earrings, and finger rings etc. Early diagnosis and management is necessary as if foreign body stays longer, it can cause dangerous complication like esophageal perforation and mediastinitis and increase the morbidity and mortality of the patient which can be avoided.

If there is no specific history, other causes of dysphagia may cause confusion in the diagnosis. The most commonly ingested object is a coin and oesophagus the second most common site of impaction.<sup>1</sup> Coins as a foreign body in esophagus is a very common presentation and forms 4.2% of all the admission cases<sup>1</sup>.

Foreign Body ingestion can be prevented by increasing the use of health education amongst public via press, television radio etc and by caring use of objects. In this study our emphasis is on the attitude of the parents about the coin which is the commonest FB found in children. Do they have minimum knowledge and do they care? So, that we can conclude whether we can prevent the coin to become Foreign Body especially in children.

Also no research in Pakistan has been made till now on this aspect of the common problem. i.e. how can we help the parents to prevent this emergency. A proforma was presented to the parents and filled to keep in the record.

## MATERIALS AND METHODS

This study was carried out at ENT department Bahawal Victoria Hospital Bahawalpur, Pakistan from July 2004 to June 2005. A total of 100 parents of the children, who were admitted with coin as a FB in esophagus, were interviewed.

A questionnaire proforma was filled and kept for record of all patients. Our emphasis was on the knowledge and attitude of the parents about coins commonly given to their children. Whether they know themselves about the

danger of coin as F Body? Whether they strictly prohibit their children or instruct them not to put these in mouth What and where is the deficiency which we can filled. The proforma included name, age, sex, address, educational status, presenting complaint with duration, exact identification of the object, time delay in hospital, status of satisfaction with hospital employees, future commitment about sense of their responsibility.

In short, the purpose of the study is to prevent wastage of our resources in those problems which can be controlled just by caring. All the patients underwent routine and radiological investigation and rigid oesophagoscopy was done in all cases for foreign body removal.

The adults above 13 years age were not included in the study. Patients having foreign body other than coin was also excluded in the study. Cases with foreign body at other sites (like nose, ear) were also excluded in the study. Children of both sexes, upto 13 years age any socioeconomic class and both rural & urban areas were included in the study.

## RESULTS

One hundred patients were enrolled for during the period of one year, from July 2004 to June 2005 in this study. Out of these, 62 were males & 38 were females. Mostly the patients were 3-7 years age i.e. 46 out of hundred. The other major portion of patients 38 were under 3 years age. (Table-I).

Also seventy two belonged to rural class & twenty belonged to slum areas of cities. It shows that problem is limited to poor class.

In our study, it was noted that 59 patients came to hospital within first day while 28 after 1-3 days. Only 3 patients reported after 7 day.

Hospital stay in these patients was tried to be kept as minimum as possible. Eighty Eight patients were discharged within 24 hours while ten patients stayed more than three days. Only two patients stay was more than 4 days due to some unavoidable reasons.

**Table-I. Bio data of children**

		%age
Age of the children	<3 years	38%
	3-7 years	46%
	7-13 years	16%
Sex of the children	Male	62%
	Female	38%
Rural/urban area	Rural area	74%
	Urban slum area	20%
	Urban posh areas	6%
Duration of presenting complaint (time b/w coin ingestion & hospital entry)	<1 day	59%
	1-3 days	28%
	4-7 days	10%
	>7 days	3%
Time b/w hospital entry and operation (hospital stay)	<1 day	88%
	1-3 days	10%
	4-7 days	2%
	>7 days	0

**Table-II. Bio data of parents**

		%age
Educational status of parents	Illiterate	64%
	Primary	23%
	Matric	12%
	Graduate	1%
	Post graduate	-
Socioeconomic class monthly income	<3000	58%
	3-10,000	24%
	10-20,000	13%
	>20,000	5%

It was noted that about two third of parents were illiterate

64/100. Also 23 out of 100 were primary pass. Only one parent was graduate (Table-II) This shows importance of education in our every day life. Fifty eight percent of the patients were very poor having income Rs.3000/-per month while 24% were having Rs. 3-10 thousands per month income (Table-II).

**Table-III. Views of parents about prevention of event**

		%age
Attitude of parents over issue	Worried/anxious	35%
	Ashamed	54%
	Not bothered	11%
Risk factors for the problem	Easy availability of coins	78%
	Easy assess of coins for children	56%
	Habit of putting coins into mouth	42%
	Lack of knowledge of parents about risk of coin as FB	88%
Future plan/commitment	Strictly bound for not giving coins to children	60%
	Strictly instruct children not put to coin in mouth	32%
	No specific precaution	08%
Recommended Suggestions	Govt. Should ban on coins	92%
	Press should inform about the danger of coin as FB	62%
	TV advertisement should be given	74%
	Printing upon coin as danger sign will be informative	68%
	Health education by LHW, LHV, will be helpful	88%

Fifty four parents were worried and anxious while thirty five were ashamed. Only eleven were not bothering about the incidence (Table-III).

According to parents views, risk factor for this problem

are easy availability of coin (78%), easy access of coin for children (56%) bad habit of children to put the coins into mouth (42%) and most important point noted that lack of parents awareness of the risk of coin to become a Foreign body in oesophagus.(88%).

In future commitments of the parents were as follows:- not to give coin to children (60%), instruct children not to put coin into mouth (32%), no specific precaution (8%).

Parents recommendations about the problem were as follow:- Government should ban coins (92%), press should play role (62%), TV/radio role (74%), printing on coins (68%), health education by LHV,LHW (88%) (Table-III).

## DISCUSSION

Foreign body ingestion is one of the commonest ENT emergency is our set up Most of the time, the patient is a child and commonest FB is a coin, which is accidentally trapped at the upper end of oesophagus.

In our study, the cases of FB consist of 7.1% of the total admission in ward. Van As et al study concluded that these cases are 4.2% of all their admission.<sup>1</sup> It is higher in our setup because of lake of education and local trends. Sittitras-P et a research showed that F Body patients were 0-9 years old.<sup>2</sup>our study also showed 84% of patients are less than 7 years old.

Fincher, RK and osgard, EM concluded that radiograph is an important investigation in case of diagnosis of coin impaction if the patient is asymptomatic.<sup>3</sup> In our study, mostly the history was obvious. Also X-Ray neck lower part + upper chest was done in every case and no case of confusion in diagnosis was recorded.

Rigid oesophegscopy is the traditional and oldest method for removal of FB in oesophagus. In our study all the cases underwent rigid oesophagoscopy and 100% success rate was noted with no gross complication. Knight, PJ removed coin using a laproscopic cautry hook as the ordinary FB forceps has ineffectual<sup>4</sup>.

During rigid oesophagoscopy, maintenance of position of

the patient is very important. Dorsal flexion of the head and neck during the procedure may cause dislodgment of the coin from epipharyngeal space into the hypopharynx as was noted by Gitzelmann –C-A. et al. from where it can be removed with Magill forceps.<sup>5</sup>

Sittitras-P concluded that complication rate can be reduced if oesophagoscopy is done within 24 ours.<sup>2</sup> On 88% of patient were operated within one day and no complication was noted.

Mac person RJ, et al stressed upon early recognition and treatment by rigid oesophagoscopy for safest results.<sup>6</sup> Our all cases were adopted this approach and 100% success rate noted.

Lovic JP et al noted a case of brain abscess following delayed endoscopic removal of initially asymptomatic esophageal coin and pointed out otorhinologic infection and cyanotic congenital heart disease as risk factors<sup>7</sup> In our study no such complication was noted.

Emslander, HC, in his research concluded that trained emergency physicians can dislodge and advance the coin from oesophagus into stomach safely and it requires no sedation or G/A.<sup>8</sup> None of our case underwent this procedure and so is not comparable.

Kain ZN et al pointed our that intravenous induction anesthesia is preferred for removed of foreign bodies in the gastro esophageal tract<sup>9</sup>.

All of our cases underwent I/V induction anesthesia and oral endotracheal incubation. So, we got 100% success rate with no complication.

Berthed LD et al used magnet tube for removal of euro coins and concluded that 1,2 and 5 euro cent pieces are magnetic and can be removed by this method, if these are stuck within 24 hours<sup>10</sup>. None of our case was operated by this method.

Dokler ML et al compared balloon extraction with endoscopy for the removal of coin and noted that endoscopy is costly by 400% as it need G/A and more

hospital stay He also pointed out 100% success rate with balloon extraction<sup>11</sup>.

Our all cases underwent rigid oesophagoscopy and it was a general public hospital meant for poor public and not private one, so finance was not encountered.

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