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Original Article

Patient's Profile of Foreign Body in the Esophagus

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Abstract

Introduction: Foreign body in the esophagus is one of the most common cases found by ENT experts.

Purpose: The purpose of the research is to obtain patient's profile of foreign body in the esophagus in the Department of Otorhinolaryngology - Head and Neck Surgery of Adam Malik General Hospital from the period of 2012 to 2016.

Materials and Methods: This is a descriptive research using medical data at Adam Malik General Hospital.

Results: There are 112 cases of foreign body in esophagus with 62 men and 50 women. Their ages ranges from 8 months to 74 years with a mean of 17.9 years. The most common type of foreign body is inorganic 83%. The location of most foreign body is in the upper-third of 91.1%. The time interval starts from swallowed until reached the nearest hospital is 6–24 h at 63.4%. The most common length of time since diagnosis is established until performing surgery is >24 h by 85.7%. There were 6,2% patients developed complications. There were significant correlations between type and location foreign body with age ($P < 0.005$).

Conclusion: This research was found profile of foreign body in the esophagus and the significant relations between type and location of foreign body with age.

Key words: Esophagoscopy, Esophagus, Foreign body, Profile

INTRODUCTION

Foreign body in the esophagus is one of the most common and emergency cases in the part of esophageal bronchus which is commonly happened.[1,2] The location of stucked foreign body depends on the size and shape of the foreign body. Small foreign bodies can go through larynx to trachea or bronchus.[3] Chest X-ray examination is the first step in investigating suspected cases of foreign bodies lodged in the esophagus.[4] Flexible endoscopy is necessary in making a diagnosis and also as a treatment when breathing disturbance occurs.[5]

MATERIALS AND METHODS

This is a descriptive research in Adam Malik General Hospital. The population is all patients of foreign body in the esophagus gained from medical record data of Adam Malik General Hospital from the period of January 1, 2012, to December 31, 2016. Sample is taken using total sampling method.

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RESULTS

There are 112 cases of foreign body in the esophagus (62 men and 52 women) aged 8 months to 74 years, with a mean of 17.9 years.

Dysphagia is the most common clinical symptom experienced by 67 patients while the most rare is no symptoms of 3 patients.

Children are the most common group in the case of inorganic foreign body that is equal to 71 people (76.3%), while adults are mostly found in case of organic foreign body 12 people (63.2%). There was a significant correlation between age group and foreign body type ($P = 0.002$).

The upper-third of the esophagus is the most common site in children of 75 (96.2%), while the middle-third is common in adults of 7 (20.6%). There was a significant relation between the location of upper-third esophagus and the occurrence of foreign bodies in children ($P = 0.008$). There was also

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Table 1: Frequency distribution cases of participants based on clinical symptoms

Clinical symptoms	Year, *n* (%)					Total, *n* (%)
	2012	2013	2014	2015	2016	
Odynophagia	6 (13.3)	9 (20.0)	15 (33.3)	4 (8.9)	11 (24.4)	45 (100.0)
Dysphagia	9 (13.4)	15 (22.4)	24 (35.8)	11 (16.4)	8 (11.9)	67 (100.0)
Drooling	3 (27.3)	2 (18.2)	1 (9.1)	2 (18.2)	3 (27.3)	11 (00.0)
Choking	0 (0.0)	3 (50.0)	0 (0.0)	1 (16.7)	3 (33.3)	6 (100.0)
Vomiting	4 (14.8)	9 (33.3)	8 (29.6)	2 (7.4)	4 (14.8)	27 (100.0)
Chest pain	1 (12.5)	1 (12.5)	4 (50.0)	1 (12.5)	1 (12.5)	8 (100.0)
Cough	1 (11.1)	4 (44.4)	1 (11.1)	1 (11.1)	2 (22.2)	9 (100.0)
No symptom	0 (0.0)	0 (0.0)	1 (33.3)	1 (33.3)	1 (33.3)	3 (100.0)

Table 2: Distribution of the proportion of age to the location of foreign bodies of age groups

Age groups	Groups of foreign body, *n* (%)		Total, *n* (%)
	Organic	Inorganic	
Children	7 (36.8)	71 (76.3)	78 (69.6)
Adults	12 (63.2)	22 (23.7)	34 (30.4)
Total	19 (100.0)	93 (100.0)	112 (100.0)

Table 3: Distribution of the proportion of age to the location of foreign body

Location	Age groups, *n* (%)		Total, *n* (%)	*P*
	Children	Adult		
Upper-third	75 (96.2)	27 (79.4)	102 (91.1)	0.008
Middle-third	3 (3.8)	7 (20.6)	10 (8.9)	0.008
Lower-third	0 (0.0)	0 (0.0)	0 (0.0)	-

a significant relation between the middle-third esophagus and the occurrence of foreign bodies in adults ($P = 0.008$).

DISCUSSION

In Table 1, the most common clinical symptoms are dysphagia (67 patients). This is similar to Anita's research (2013), and dysphagia is the most common symptom (66 patients).[1] While the research of Sumertini and Sucipta (2017), the most clinical symptom is odynophagia (47.62%).[5] Zuleika and Ghanie (2016) found that most clinical symptoms were wedge (86.04%).[6] From Table 2, there was a significant relationship between foreign body type and age group ($P = 0.002$). Of 93 cases of inorganic foreign objects, 71 cases (76.3%) occurred in children. Unlike the case with the case of organic foreign body which in children, there are as many as 7 cases (36.8%). This is similar to Anita's (2013) study of 70 cases (67.3%) were children <15-year-old with inorganic foreign objects and 8 cases (88.9%) in adult with organic foreign bodies. According to Table 3, 75 cases (73.5%) of foreign bodies in the upper-third are grouped, and in the middle of the esophageal area, there are 7 cases (70%) in the adult group. Statistically, there was a significant association ($P = 0.008$) between the upper-third with the children group and the middle-third with adult. Similarly, in the study of Koirala *et al* (2012), in children, 92.8% of foreign body cases were located in the upper-third of the esophagus, and in adult, there were 66.7% of foreign body cases in the middle-third and were statistically significant ($P < 0.001$).[7]

CONCLUSION

This research found that dysphagia is the most common clinical symptom, and there was a significant relationship between type and location of foreign body with age.

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