



Description Of Foreign Bodies in The Esophagus in The ORL-HNS Section Of RSUP M. Djamil Padang Period 2020-2021 (COVID-19 Pandemic)

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Abstract. Esophageal foreign bodies are sharp or blunt objects or food that get stuck and pinched in the esophagus due to swallowing, either intentionally or unintentionally. Symptoms of esophageal foreign body obstruction depend on the size, shape, type of foreign body and the location of the foreign body. The purpose of this study was to determine how the description of foreign bodies in the esophagus in the ORL-HNS section of Dr. M. Djamil Hospital during the period 2020-2021 (Covid-19 Pandemic). This study is a descriptive study using a cross-sectional design. The sample of this study was a population that met the inclusion criteria using the total sampling method. This data collection used patient medical records conducted at the center of the medical record facility at Dr. M. Djamil Padang Hospital. The subjects of this study were patients diagnosed with esophageal foreign body ingestion in the ORL-HNS department of Dr. M. Djamil Hospital Padang in the period 2020-2021 (COVID-19 Pandemic). In this study, 22 samples were obtained that met the inclusion and exclusion criteria of the study. The results of this study found that the percentage of sex ratio between men was comparable to women with the largest age group, namely 0-<10 years (59.09%). There were most main complaints felt by patients, namely swallowing pain (31.81%) with the duration of foreign body in the esophagus mostly >12-24 hours (50%). The location of the most foreign bodies was in the introitus of the esophagus (72.73%) with the most types of foreign bodies coins (50%) and the most management performed was esophagoscopy (100%) and no complications were found in 17 cases (77.27%) of 22 cases. During the covid-19 pandemic there was a decrease in the number of patients swallowed by foreign bodies compared to before the covid-19 pandemic, there were no differences in age, complaints, location, type of foreign body, duration, management and complications.

Keywords: Covid-19, Esophagus, Foreign Bodies

1. INTRODUCTION

Esophageal foreign bodies are sharp or blunt objects or food that get stuck and pinched in the esophagus due to swallowing, either intentionally or unintentionally. The symptoms of oesophageal foreign body obstruction depend on the size, shape and type of foreign body, the location of the foreign body (whether it is in the normal or pathological narrowing of the oesophagus), complications arising from the foreign body and the duration of the foreign body ingestion. The first symptom of an esophageal foreign body is pain in the neck if the foreign body is stuck in the cervical region. If the foreign body is stuck in the distal esophagus, there will be discomfort in the substernal region or pain in the back. Foreign bodies in the esophagus can cause dangerous conditions, such as obstruction and airway compressions.

During the covid-19 pandemic, there was a decrease in the number of patients coming to the emergency room, which could be due to the fear of people contracting covid-19 in the hospital (Yunizaf et al., 2012) from the explanation above, the authors are interested in conducting research to find out whether there are differences in esophageal foreign body

patients according to gender, age, chief complaint, duration, location, type of foreign body, management and complications during the covid-19 pandemic and before the covid-19 pandemic.

2. LITERATURE REVIEW

A foreign body is an object that is found where it should not be. Foreign bodies found in an organ can come from outside the body or inside the body that should not be there. Foreign bodies swallowed and located in the esophagus can be caused by a person's lack of caution and a small number of cases are due to intentional elements. (Yunizaf et al., 2012).

Foreign bodies in the esophageal region cause obstruction and discomfort. Eating and playing in children, especially when screaming, can lead to aspiration because during laughter or screaming, the rhyme of the glottis opens. The aspiration of foreign bodies into the subglottis, trachea or bronchi will cause the reflex closure of the glottis which is not working properly (Nadia et al., 2020)

Foreign bodies swallowed by the mouth may stop in the oropharynx, hypopharynx, tonsils, base of tongue, pyriform sinus, esophagus or may choke into the larynx, trachea and bronchi. Symptoms can vary from asymptomatic to death before help is given, usually due to complete obstruction (Yunizaf et al., 2012). Therefore, the diagnosis of foreign body ingestion should be made based on history taking, physical examination, supporting examination, and other supporting examinations.

A coin foreign body is not an emergency, but should be removed as soon as possible through optimal esophagoscopy preparation to prevent complications. Ingested foreign bodies may result in mucosal laceration, bleeding, localized perforation with neck abscess, or mediastinitis. Oesophageal perforation may result in site cellulitis, oesophageal tracheal fistulas. Round or blunt foreign bodies may also result in perforation, as secondary causes of chronic inflammation and erosion. Formation of granulation tissue in the area around the foreign body may occur if the object remains for a long time. (Yunizaf et al., 2012).

3. RESEARCH METHOD(S)

This study is a descriptive study using a cross-sectional design. The sample of this study was a population that met the inclusion criteria with the total sampling method. This data was collected using the patient's medical record at the central medical record facility at Dr. M. Djamil Hospital Padang. The subjects of this study were patients diagnosed with esophageal foreign body ingestion in the ORL-HNS department of Dr. M. Djamil Hospital Padang in the

period 2020-2021 (COVID-19 Pandemic). In this study, 22 samples were obtained that met the inclusion and exclusion criteria of the study.

Findings

A descriptive cross-sectional study was conducted on esophageal foreign body patients with secondary data from the ORL clinic and medical records conducted at Dr. M. Djamil Padang Hospital for the period 2020-2021 (covid-19 pandemic) and obtained a sample of 22 people.

Table 1 shows the results of the study that the most age of leprosy patients at the Skin and Kelamin Polyclinic of Dr. M. Djamil Padang Hospital in 2017-2021 was >14 years old, namely 39 samples (100%).

Table 1. Distribution of esophageal

Year	Male	Female	N
2020	8	3	11
2021	3	8	11
Total	11	11	22

foreign body patients based on gender.

Based on Table 1, it was found that the total number of patients with esophageal foreign body ingestion between males 11 cases and females 11 cases with a ratio of 1:1

Table 2. Distribution of esophageal foreign body patients based on age group

Age (Year)	N	Percentage (%)
0-<10	13	59,09
10-<20	0	0
20-<30	2	9,09
30-<40	1	4,55
40-<50	2	9,09
≥50	4	18,18
Total	22	100

Based on Table 2, the highest incidence of esophageal foreign body cases occurred at the age of 0-10 years, namely 13 people (59.09%) out of 22 cases.

Table 3. Distribution based on residence of leprosy patients

Place of Residence	N	Percentage (%)
Foreign body ingestion	3	13,63
Swallowing pain	7	31,81
Swallowing difficulty	6	27,27
Neck pain	3	13,63

Neck stiffness	0	0
Vomitting	3	13,63
Other	0	0
Total	22	100

Based on Table 3 in this study, it was found that the main complaint of patients with esophageal foreign bodies was swallowing pain, as many as 7 people (31.81%)

Table 4. Frequency distribution of patients who ingested foreign bodies in the esophagus according to the duration of foreign bodies in the esophagus

Time (Hours)	N	Percentage (%)
2-12 hours	8	36,36
>12-24 hours	11	50
>24-48 hours	2	9,09
>48-72 hours	0	0
>72 hours	1	4,55
Total	22	100

Based on Table 4, it was found that the duration of esophageal foreign bodies until they were removed was mostly in the >12-24 hour range, namely 11 patients (50%).

Table 5 Frequency distribution of patients who ingested foreign bodies in the esophagus according to the location of the foreign body

Hours	N	Percentage (%)
Esophageal introitus	16	72,73
Crossing with bronchus	2	9,09
Crossing with aorta	2	9,09
Lower sphincter	2	9,09
Total	22	100

Based on Table 5 in this study, it was found that the location of the foreign body in the esophagus was mostly in the esophageal introitus, namely 16 patients (72.73%). This study found that the type of esophageal foreign body swallowed most was coins, namely 11 patients (50%) out of 22 cases that occurred. In this study, it was found that the management given to patients with esophageal foreign bodies was esophagoscopy, namely 22 people (100%). in this study, it was found that complications due to foreign bodies that occurred in esophageal foreign body patients were no complications, namely 17 people (77.27%).

4. DISCUSSION

Distribution of Esophageal foreign body patients

The results of this study found that patients with foreign bodies in the esophagus at ORL-HNS Dr. M. Djamil Padang Hospital for the period 2020-2021 (covid-19 pandemic) between men and women were equal with a ratio of 50:50. The results of this study are different from research conducted by Tika (2017) who conducted research in the ORL-HNS section of Dr. M. Djamil Padang Hospital for the period 2011-2015 which obtained results, namely 56 male patients (64.4%) and 31 female patients (35.6%) with a ratio of 1.8: 1, based on research conducted in the ORL-HNS section of Dr. M. Djamil Padang Hospital for the period 2020-2021 during the pandemic. Djamil Padang for the period 2020-2021 during the covid-19 pandemic, it can be concluded that gender does not really affect cases of esophageal foreign bodies, but the covid pandemic affects the number of cases that occur each year where there is a decrease in cases where the average number of cases in this study is 11 per year, while research conducted by Tika (2017) who conducted research in 2011-2015 which obtained an average number of cases per year of ± 17.4 cases per year. This could be due to the fear factor of the community to visit the hospital for fear of contracting covid-19 (Kornia et al., 2016).

Distribution of esophageal foreign body patients according to age

In this study, it was found that patients with foreign bodies in the esophagus occurred mostly at the age of 0-10 years, namely 13 people (59.95). This is in accordance with research conducted by Marasebessy (2015) in the Section / SMF ORL-HNS BLU RSUP Prof. Dr. R. D. Kandou Manado obtained the most cases of the Faculty of Medicine of Andalas University. At the age of 0-10 years as many as 17 cases (32.7%) of 52 cases, the results of this study are also in accordance with those conducted by Tika (2017) who conducted research in the ORL-HNS section of Dr. M. Djamil Padang Hospital for the period 2011-2015 which found that the highest age was 0-10 years, namely 32 (36.8%) of 87 patients (Kornia et al., 2016).

The high incidence of esophageal foreign bodies tends to occur a lot in children, it can be caused by molar teeth that have not grown in order to help the process of chewing food, and in children there is also an oral phase where children will put objects around them into the mouth without knowing whether these objects can be consumed or not, while in adults it is often in drunks, denture wearers who do not carry out routine checks and sufferers of mental disorders, This study shows that during the covid-19 pandemic and before the pandemic there was no difference in age distribution (Yunizaf et al., 2012).

Distribution of esophageal foreign body patients according to main complaints

The main complaint felt by patients with foreign bodies in the esophagus at ORL-HNS Dr. M. Djamil Padang Hospital for the period 2020-2021 (covid-19 pandemic) was mostly swallowing pain as many as 7 cases (31.81%). This is different from Tika's research in 2017 in the ORL-HNS section of Dr. M. Djamil Padang Hospital with the most main complaints being referrals from regional public hospitals, namely 23 people (56.1%) this is due to Dr. M. Djamil Hospital is a type A hospital where regional public hospitals will refer. In general, the symptoms that occur in patients swallowed foreign bodies for less than 24 hours include swallowing pain, difficulty swallowing and vomiting, and hypersaliva, this can be caused by the influence of the shape and type of foreign body swallowed. The symptom of painful swallowing can be caused by mucosal edema that will aggravate the obstruction (Yunizaf et al.,2012).

Distribution of esophageal foreign body patients according to duration

The results of this study found that patients with foreign bodies in the esophagus at ORL-HNS Dr. M. Djamil Hospital Padang for the period 2020-2021 (covid-19 pandemic) the most foreign bodies until they were removed were >12-24 hours as many as 11 cases (50%). The results of this study are the same as research conducted by Tika in 2017 in the ORL-HNS section of Dr. M. Djamil Padang Hospital which got the most results 0-2 days, namely 31 people (75.6%) and Wang reported that the duration of foreign bodies swallowed until examination varied from 2-18 hours, and within 24 hours received management (Kornia et al., 2016).

At this time the awareness of patients to go to the hospital has increased so that it can be managed in the first 24 hours. This is also because many cases of foreign body ingestion in the esophagus occur in children, and parents will worry about seeing their children ingesting foreign bodies because they see the complaints and symptoms caused. Patients who are treated within the first 24 hours after swallowing a foreign body can avoid complications caused by foreign bodies because if the foreign body stays in the esophagus for a long time, granulation tissue will form around the foreign body. The duration of foreign bodies until they are removed can occur due to factors such as the location of the referral hospital and the effects of symptoms caused when swallowing foreign bodies appear when it is several hours after being swallowed (Yunizaf et al., 2012).

Distribution of esophageal foreign body patients according to foreign body location

The location of the most stuck foreign bodies in research conducted at ORL-HNS Dr. M. Djamil Hospital Padang for the period 2020-2021 (covid-19 pandemic) was in the esophageal introitus, namely 16 patients (72.73%). This is also supported by research conducted by Naveen (2018) in India where the most common location of esophageal foreign bodies was located in the upper esophagus as many as 75 out of 84 patients (89.2%) (Maryam et al., 2021)

Foreign bodies that are not food are mostly stuck in the cervical esophagus, this can be caused because the esophageal introitus is the first narrowing of the esophagus and has the smallest lumen.

Distribution of esophageal foreign body patients according to type of foreign body

Foreign bodies found in patients with foreign bodies in the esophagus were mostly in the form of coins, namely 11 cases (50%). This is similar to research conducted by Naveen (2018) in India where 49 cases (58.33%) of a total of 84 cases of foreign body ingestion were found (Maryam et al., 2021).

From the results of the research conducted, it was found that the most foreign objects swallowed were coins, coins are non-organic foreign bodies which are one of the emergency cases in the ORL-HNS field and coins must be removed immediately so that complications do not occur, this happens a lot in the age range of children, the high incidence in children can be due to the curious nature of children who want to enter objects that are around them as an effort to know the surrounding environment without knowing whether the object can be consumed or not, from this study it was found that the foreign object was a coin. And followed by foreign bodies of dentures without wires where foreign bodies of dentures also often occur, especially in adults or the elderly, which can be caused by not routine in routine examinations so that they can be swallowed along with the swallowing process (Yunizaf et al., 2012).

Distribution of esophageal foreign body patients according to management

The management of foreign bodies in the esophagus in this study was mostly esophagoscopy, namely 22 patients (100%). This is because at Dr. M. Djamil Padang Hospital, management using esophagoscopy has become a protocol in managing esophageal foreign bodies and the esophagoscopy used must be in accordance with the size and shape of the foreign body, after the foreign body is successfully removed, esophagoscopy will be performed again to see if there are any pre-existing complications. If a sharp foreign body cannot be removed,

surgery will be performed depending on the location of the foreign body, the operation can be a cervicotomy, thoracotomy or esophagotomy (Yunizaf et al., 2012).

Distribution of esophageal foreign body patients according to complications

In this study, there were no complications in 17 cases (77.27%) out of 22 cases that occurred and there were 5 complications that occurred due to foreign bodies that had been more than 24 hours in the esophagus, which could occur because the swallowed foreign body was sharp or sharp, such as dentures with wires and there were no complications due to esophagoscopic action. This is in accordance with research conducted by Zuleika and Alba (2016) in the ORL-HNS Section of the Faculty of Medicine, Sriwijaya University / RSUD Dr. Mohammad Hoesin Palembang who found that the most results of 43 patients who swallowed foreign bodies had no complications that occurred in patients as a result of esophagoscopy (100%) (Yunizaf et al., 2012)

Foreign bodies can cause lacerations to the mucosa, perforation, bleeding and others, perforation is one that often occurs as a result of foreign bodies in the form of a taper and will cause local cellulitis and tracheoesophageal fistulas. Blunt foreign bodies can also cause perforation if they remain in the esophagus for too long as a secondary result of chronic inflammation and erosion. Complications due to management are rarely found compared to cases of complications due to foreign bodies (Yunizaf et al., 2012)

5. CONCLUSION AND RECOMMENDATION

In this study, it can be concluded that based on gender, males are comparable to females with the most age range 0-<10, the main complaint most felt is swallowing pain with the most duration >12-24 hours, the location of the most foreign body stuck is the esophageal introitus and the most types of foreign bodies are coins, all esophageal foreign body management uses esophagoscopy and most cases there are no complications due to foreign bodies.

ACKNOWLEDGEMENT

The researchers would like to thank all those who helped in completing and improving this research.

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