



## **A Retrospective Study of ENT Foreign Bodies During Lock Down and Post Lockdown Period of 2020**

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### **ABSTRACT**

*COVID- 19 began in month of December in Wuhan, a southeast province of China and spread to the entire world and was declared a Pandemic by WHO on March, 2020. During this period of lockdown there has been a surge in number of ENT foreign body cases. The study aims to determine the incidence of ENT foreign body during the period of lockdown and study the nature of ENT foreign body. 289 cases presented to our tertiary care centre between month of April 2020 to September 2020 with complaints of Foreign body in Ear nose and throat were included in the study. Of the 289 cases 22.8% of cases presented during month of May (n= 66) and gradually decreased on further months. The most common site of foreign body was ear (40.8%).49.4% of patients presented immediately (n=143) and 4.8% (n=14) patients presented with ENT foreign body in place for more that 1 week. Foreign bodies in place for more than 1 week were considered neglected foreign bodies and it was found that there has been an increase in incidence of neglected foreign bodies during month of June i.e. the post lockdown period. This study conducted for a period of 6 months has brought out one of the major deficits in our health care system i.e. the management of non COVID patients with ailments. With the ongoing pandemic it's important to formulate newer strategies to avoid unnecessary complications that arise due to the time lag.*

**Keywords:** ENT foreign bodies, COVID, Lockdown

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### **INTRODUCTION**

COVID- 19 began in month of December in Wuhan, a southeast province of China and spread to the entire world and was declared a Pandemic by WHO on March, 2020 [1,2]. After which many countries around the world declared complete lockdown. In India nationwide lockdown was announced on 24<sup>th</sup> March 2020 and continued for a period of 21 days [3,4]. The lockdown was extended with various degrees of relaxation and restrictions till month of September [4].

During this period of lockdown there has been a surge in number of ENT foreign body cases [5]. There are a very few emergency cases in ENT of which ENT foreign bodies are most common [6]. Though the techniques employed in removal of these foreign bodies involve a large amount of aerosol generation, still these procedures could not be avoided or postponed, which put the ENT surgeons under greater risk [7]. The study aims to determine the incidence of ENT foreign body during the period of lockdown and study the nature of ENT foreign body, thereby creating awareness among people regarding the need to get immediate medical attention in spite of COVID lockdown.

### **MATERIAL AND METHODS**

This is retrospective study conducted in our tertiary care centre from period of April 2020 to September 2020. Institutional ethical committee clearance was obtained prior to the beginning of the study. All patients who came to ENT OPD between month of April 2020 to September 2020 with complaints of ENT foreign body were included in the study.

The details of patients such as age, sex, type and site of foreign body and time of presentation were collected from Op records, duty register and OT records. The collected data for each patient were entered in a case proforma by the hospital staff. The number of patients who presented to our hospital with complaints of ENT foreign body during month of April 2019 to September 2019 were also collected from

OP records and duty register. The collected data was entered in excel sheet and later analysed using spss16 software.

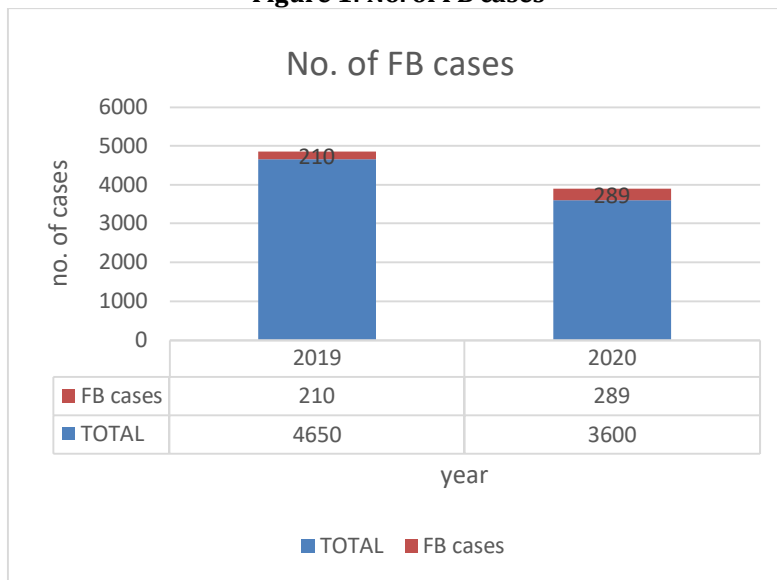
**RESULTS:**

A total of 289 cases presented to our tertiary care centre between month of April 2020 to September 2020 with complaints of Foreign body in Ear nose and throat. The demographic details of these patients are shown in Table 1. The incidence of ENT foreign bodies during the lockdown and post lockdown period of 2020 was found to be 8.06% which is much higher than the percentage (4.51%) of cases with ENT foreign bodies who presented to our tertiary care centre during same months of 2019 shown in figure 1.

**Table 1: Demographics data**

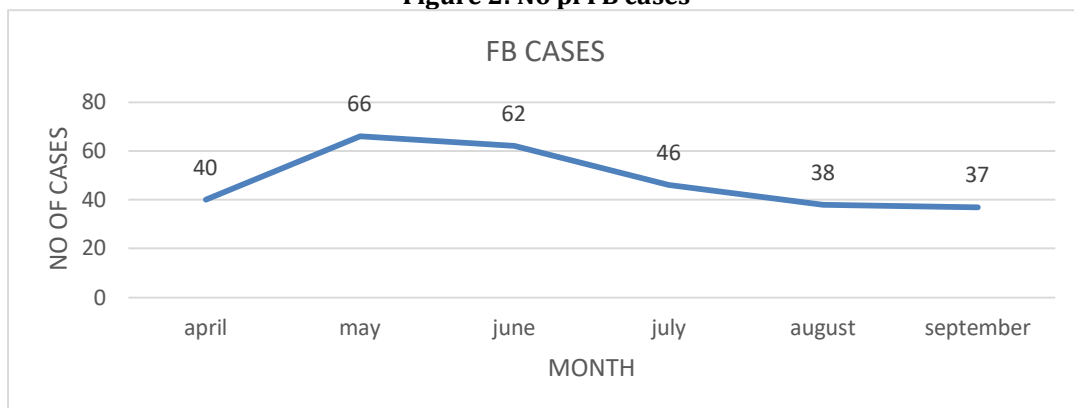
AGE GROUP	NO. OF PATIENTS			PERCENTAGE OF TOTAL PATIENTS
	SEX		TOTAL	
	MALE	FEMALE		
<3 YEARS	12	10	22	7.6%
4 -7 YEARS	43	30	73	25.2%
8 - 12 YEARS	49	36	85	29.4%
12 -18 YEARS	37	29	66	22.8%
>18 YEARS	20	23	43	15.2%

**Figure 1: No. of FB cases**



Of the 289 cases 22.8% of cases presented during month of May (n= 66) and gradually decreased on further months shown in figure 2. The most common site of foreign body was ear (40.8%) shown in table 2 .49.4% of patients presented immediately (n=143) and 4.8% (n=14) patients presented with ENT foreign body in place for more that 1 week shown in table 3.

**Figure 2: No pf FB cases**



**Table 2: Site of FB**

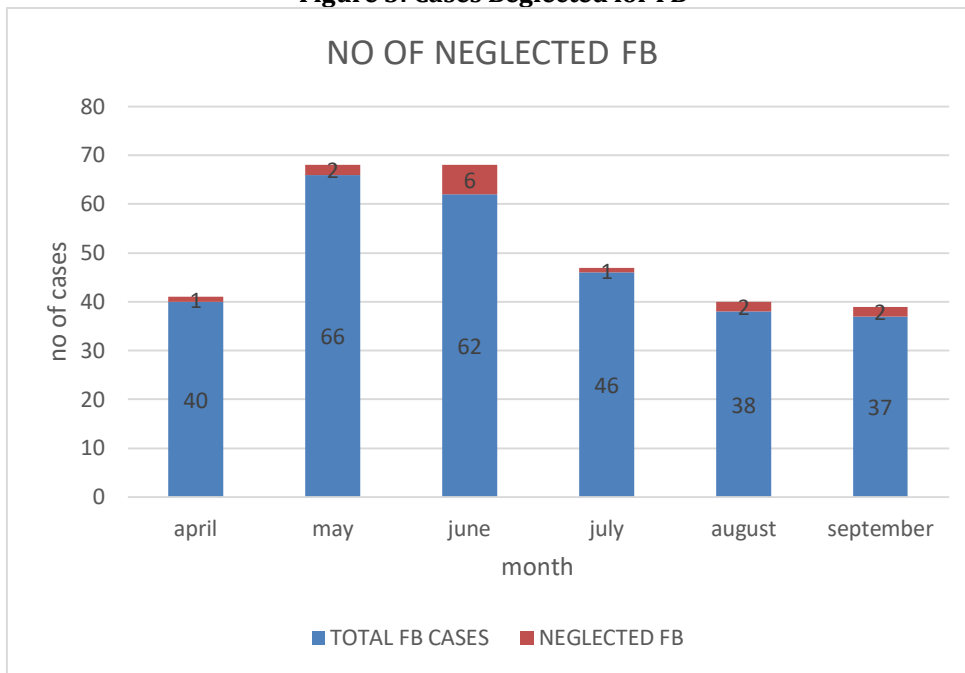
SITE OF FB	NO OF CASES	PERCENTAGE
EAR	118	40.8%
NOSE	107	37.02%
THROAT	64	22.1%

**Table 3: Time of presentation**

TIME OF PRESENTATION	NO OF CASES	PERCENTAGE
IMMEDIATELY	143	49.4%
1-3 days	85	29.4%
3-7 days	40	13.8%
>1 week	14	4.8%

Foreign bodies in place for more than 1 week were considered neglected foreign bodies and it was found that there has been an increase in incidence of neglected foreign bodies during month of June i.e., the post lockdown period (9.6%) shown in figure 3. 73.3% of foreign bodies were removed in ENT OPD with usage of PPE kits irrespective of the patients COVID status. 30.7% of patients required removal of foreign bodies under general anaesthesia.

**Figure 3: Cases Beglected for FB**



**DISCUSSION**

The viral load in nasopharyngeal secretions is found to be highest,  $1.2 \times 10^8$  infective copies per ml, indicating high risk of transmission associated with the ENT procedures [8]. A number of protocols for ENT procedures have been given by various institutions and health bodies. With an increasing trend in the incidence of ENT foreign bodies, our study aims to evaluate the nature of foreign bodies removed in our tertiary care centre.

In our study the incidence of ENT foreign bodies of the total ENT cases was found to be 8.06% (n=289) which is much higher than the ENT foreign body cases presenting to our hospital during the same months of previous year. There are no studies which has documented the incidence of ENT foreign bodies during COVID times as such but a study by sambhaji et al has documented a raise in ENT foreign bodies during COVID times. This might be due to increased indoor activities and playing with inanimate objects as all the education centres or recreational areas had been closed [9].

As per the study by bellad et al 58.8% (n=10) of patients were less than 5 years of age and 17.6%(n=3) of patients were in the age group of 5 to 10 years. majority of patients i.e. 70.5% were males and male: female ratio is 2.4:1 [10] whereas in our study 29.4% of patients were between 8 to 12 years and 25.2% of patients were between 4 to 7 years and majority of patients were male (55.7%) and male: female ratio was 1.2:1. Majority of foreign bodies were in ear. 73.3% of foreign bodies were removed in ENT OPD and 30.7% of patients required removal of foreign bodies under general anaesthesia.

In our study the peak number of FB cases were encountered in the month of May. 49.4% of total patients presented immediately to the hospital and 4.85% of total patients presented with neglected foreign

bodies. It was noted that the number of neglected foreign body was highest in the month of June (28.5%) i.e the post lockdown period. This may be due to hesitation to come to hospital because of fear of COVID, lack of transportation, poor financial status. A study by suparna et al has documented a significant time lag between onset of symptoms and time of seeking medical care in patients with nasal foreign bodies during the lockdown period [11].

## CONCLUSION

This study conducted for a period of 6 months has brought out one of the major deficits in our health care system i.e., the management of non-COVID patients with ailments. With the ongoing pandemic its important to formulate newer strategies to avoid unnecessary complications that arise due to the time lag. Certain techniques such as

- The usage of tele medicine to pick out non COVID emergent cases needing medical attention.
- Making people aware about the increasing trend of simple cases becoming complicated due to delayed presentation.

Can be implemented to overcome this area of lacunae.

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