

Clinical Course And Outcomes Following Dental Foreign Body Ingestion: Adverse Events And Need For Endoscopy

Lucía Rivera-Matos MD*, Mohammad U. El-Saied MD*, Jennifer Bereckis RDH MS***, Georgia Lymberopoulos DMD MPH***, Susan Rowan DDS MS***, Anna M. Lipowska MD**

*Department of Medicine, Division of Academic Internal Medicine, **Division of Gastroenterology and Hepatology, *** College of Dentistry University of Illinois at Chicago, Chicago, IL 60612

INTRODUCTION

- Foreign body ingestion during dental procedures is a rare complication that often requires medical evaluation and consideration for object extraction.
- Data in existing literature is scarce on patient outcomes and need for endoscopy after dental foreign body ingestion (DFBI).
- Patients often present with limited available medical information, making them difficult to treat.
- Given the uncommon presentation of DFBI, more information would aid gastroenterologists and hospital inpatient teams to help guide treatment plans.
- We aim to better define patient clinical course after DFBI and identify factors that may influence outcomes.

METHODS

Retrospective review of DFBI cases at a tertiary care center between 2015 and 2021.

Exclusion criteria: age <18 years old

Data collection

Electronic medical record review

Patient information, clinical course, imaging, interventions, and timeline

RESULTS

	Sharp (9)	Blunt (11)	Unknown Sharpness (5)	P-value
OBJECT CHARACTERISTICS				
Object Length (mm)				
unknown	3 (50%)	3 (50%)	0	
<10	2 (20%)	4 (40%)	4 (40%)	
>10	4 (44%)	4 (44%)	1 (11%)	
Object Width (mm)				
unknown	5 (38%)	5 (38%)	3 (23%)	
<10	0%	4 (66%)	2 (33%)	
>10	4 (66%)	2 (33%)	0	
CLINICAL COURSE				
Admitted (8)	3 (37.5%)	2 (25%)	3 (37.5%)	0.436
X-ray (24)	9 (37.5%)	10 (41.6%)	5 (20.8%)	
CT Scan (3)	2 (66.6%)	1 (33.3%)	0	0.413
Specialty Consult (10)	4 (40%)	2 (20%)	4 (40%)	0.202
Object Removed (3)	2 (66.6%)	1 (33.3%)	0	0.413
Endoscopy (4)	2 (50%)	1 (25%)	1 (25%)	0.413
Complications	-	-	-	

Table 1. Clinical course of DFBI based on object sharpness and object characteristics

Population: 25 patients were included

Gender: 56% male

Diverse cohort (40% Caucasian, 20% African American, 8% Hispanic, 4.3% Asian, 28% Other)

Age: mean 64 (SD14.8).

Figure 1: Cohort characteristics

DISCUSSION

- This study examines a rare cohort of patients who experienced DFBI and provides better understanding of their clinical course to help guide care decisions.
- Our findings highlight that DFBI has mostly a benign clinical course and can likely be managed conservatively if the object is distal to the esophagus.
- While a number of DFBs are sharp, even those that were not retrieved passed uneventfully and without complications, likely due to their small size.
- No specific patient/object characteristics were associated with need for hospital admission, endoscopic intervention, or increased rate of adverse events.