

Swallowed Screw

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INTRODUCTION

Children commonly place objects in the mouth. This often results in accidental swallowing of foreign bodies¹A large variety of objects are swallowed by children including some which are very bizarre, but coins are the most common.²

The ingestion of foreign bodies is a common problem in the pediatric age group but fortunately most of the foreign bodies pass through the gastro-intestinal tract without any adverse effect¹

The aim of this report is to present a case of an unusual swallowed foreign body- a screw.

CASE REPORT

M.S is a 6years old boy who was brought to the Accident and Emergency Department of Aminu Kano Teaching Hospital Kano with a history of having accidentally swallowed a screw while playing with it in his mouth, about 2 hours prior to presentation. There was no associated vomiting or abdominal pain. Systemic examination was essentially normal.

The patient was then referred to the Radiology department for a plain abdominal radiograph which showed the screw in the right upper quadrant in the sub-hepatic region presumably in the duodenum (Fig 1).



Fig 1. A plain abdominal radiograph showing the swallowed nail in the anatomical location of the duodenum (arrow)

He was managed conservatively and the radiograph was repeated after three days which showed absence of the screw indicating that it been completely passed out (Fig 2). The patient had no other complaints



Fig 2. A repeat radiograph (3 days later) showing absence of the swallowed nail.

DISCUSSION

The ingestion of foreign bodies is most commonly a problem in young children aged 6 months to 5 years, but can affect children of all ages (those younger than 6 months can occasionally ingest materials with the aid of older siblings during play)^{3,4}. It occurs much less frequently in older children and adults but does affect these groups rarely. It may occur accidentally or purposefully; patients with mental illness, intellectual impairment, prisoners or 'drug-mules'/'body-packers' (those involved in the smuggling of illicit drugs concealed in the gastrointestinal tract) are prone to problems caused by purposeful ingestion of foreign bodies⁵. The exact incidence of foreign body ingestion varies widely. Various series, report from about eight (8) to three hundred (300) esophageal foreign bodies per year¹⁻³

The highest incidence of swallowed foreign bodies occurs in children between six months and three years.⁶ Kelly et al. reported 67% of their patients were less than three years of age.⁶ The patient in this case was 6 years old and had no features of mental sub normality or psychiatric illness

Most of the patients are asymptomatic. The symptoms depend on if and where the foreign body is lodged. The most common site where the foreign body may become impacted is the oesophagus especially at the level of the cricopharyngeus muscle and just below it⁷. Other possible sites include the gastro-oesophageal- junction, pyloric cannal and the ileo-caecal junction²

The diagnosis can be confirmed by a plain radiograph of the neck/chest/abdomen, barium swallow/meal, CT scan of the neck/chest/abdomen⁵. A plain abdominal radiograph was able to demonstrate the swallowed nail in this case.

Once a swallowed foreign body has passed the gastro-oesophageal junction, most will pass uneventfully in the stool. The exact amount of time it will take to pass is not predictable as the transit time is variable⁸ Al-Beriki et al.⁹ advocated keeping these patients under observation and suggested hospitalization if the foreign body is sharp and unusually large. Early Endoscopic removal of foreign bodies lodged in the esophagus and conservative management of foreign bodies which have passed the gastro-oesophageal junction are recommended. Laparotomy is rarely indicated in the management of swallowed foreign bodies, although various observers are not in full agreement as to the circumstances in which "watchful waiting" is advisable nor as to how long it is permissible to wait for spontaneous passage². This patient was not admitted and the foreign body was passed out uneventfully.

The complications of swallowed foreign bodies include: esophageal/stomach/bowel perforation, impaction, tracheo-esophageal/entero-cutaneous fistula and

stricture formation¹⁰. Our patient did not have any of these complications.

SUMMARY

Swallowed foreign bodies in children are not a very rare occurrence but most of these objects are blunt. Below is presented an unusual swallowed foreign body- a screw. The diagnosis was confirmed by a plain abdominal radiograph and the patient was managed conservatively. A repeat radiograph taken three days later did not show the nail indicating complete passage of it.

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