

Migrating Superglue Pin In The Gastro-Intestinal Tract Of An Adult Nigerian Male-The Need For Caution.

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Abstract

Background/ Aim: Ingestion of foreign bodies is rare among adults, this case highlights accidental ingestion of a superglue pin in an adult Nigerian. This case is to highlight the need for caution on careless insertion of foreign bodies in the mouth among adults especially.

Materials and Methods: A 28 year old male driver, presented at the accident and emergency unit of the University of Ilorin teaching Hospital, Ilorin-Nigeria with a three day history of accidental swallow of super glue pin which was held between his teeth while repairing his wrist watch. There was pooling of saliva in the oropharynx and anterior neck tenderness. He had plain radiographs of the neck and emergency rigid oesophagoscopy under general anaesthesia to extract the foreign body which could not be extracted. Postoperative plain radiographs of the neck and abdomen were done.

Results: Plain X-ray of the soft tissue neck revealed a radio- opaque object measuring about 3cm in length lying obliquely within the prevertebral soft tissue space at the level of C5 C7, extending anteriorly into the trachea. Rigid oesophagoscopy up to the cardia of the stomach did not reveal any foreign body.

Postoperative abdominal x-rays showed the object in the right iliac fossa and it was eventually expelled in the faeces without further surgical intervention.

Conclusions: A case of super glue pin traversing the entire gastrointestinal tract in an adult male Nigerian following accidental ingestion without the possible complications despite late presentation is presented. The need for caution on careless insertion of pins or foreign bodies in the mouth is advised.

Key words: Migrating; Pin; Oesophagoscopy; Uncomplicated; Prevention.

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Introduction

Foreign body in the aero- digestive tract is a common phenomenon in otorhinolaryngological practice worldwide especially in infants and children together with edentulous adults^{1,2,3}. The common objects are coins in children, fish bones and dentures in adults^{2,3}. Incidence of impacted pin is low in our environment¹⁻³. It usually follows careless insertion of pin between the teeth with the intention of using it for a purpose.

This is a case of complete migration of a superglue pin along the entire gastrointestinal tract without causing any complication even though it is a sharp object in a patient with delayed presentation. This case is to highlight the need for caution on careless insertion of pins or other foreign bodies in the mouth in order to avoid complications and needless surgery

Case Report

A 28 year old male Nigerian driver, presented at the accident and emergency unit of the University of Ilorin teaching Hospital, Ilorin, Nigeria with a three day history of accidental swallowing of super glue pin, which was held between his teeth while repairing his wrist watch. There was associated dysphagia, odynophagia, drooling of saliva and neck pain. No associated difficulty in breathing or neck swelling. No previous history of psychiatric illness.

Examination revealed a young man, not in any obvious respiratory distress but anxious and restless. Indirect laryngoscopy showed pooling of saliva, no foreign body was visualized but associated anterior neck tenderness. Other systems were essentially normal. An assessment of foreign body in the oesophagus was made.

Plain radiographs of the neck showed a radio- opaque shadow measuring about 3cm in length lying obliquely within the prevertebral space at the level of C5 C7, extending into the trachea anteriorly with the sharp end pointing upwards (Figs. I & II). The Full blood count (FBC), Chest x-ray, Electrolyte&Urea (E & U) and Creatinine were all within normal limits.

Patient had oesophagoscopy, under general

anesthesia twenty four hours after presentation due to financial constraints and no foreign body was seen. Post operative plain radiographs of soft tissue neck and chest immediately after surgery did not show any foreign body, however the abdominal radiograph showed the same radio opaque object in the right iliac fossa (Fig.III). Patient was then co-managed with the general surgical team and conservative management was instituted. Patient then passed the metallic object in his faeces on the third day post endoscopy as shown in fig.IV. He was subsequently discharged and out-patient visit was uneventful.

Discussion

Impaction of swallowed foreign body in the food passages is a common problem especially in children less than five years of age and infants⁴. Accidental ingestion among adults has been reported to be at the peak between 20-30 years⁵, the group which our patient belonged to. However, adults that deliberately ingest foreign body are usually suffering from mental disorder or psychiatric illness¹. Our patient had no previous history of psychiatric illness as the ingestion was said to be accidental.

Common foreign body ingested in children are coins while in adults, it is usually fish bones and dentures and report of pin ingestion has not been common in studies done previously^{1, 2, 3, 6, 7, 8}. Symptoms of patient that ingest foreign body include sudden onset of dysphagia, odynophagia, drooling of saliva, neck pains or breathlessness if the object is in the airway or compressing it especially in children^{1, 5, 9}.

Our patient had all these features but no hoarseness or breathlessness even though pin appeared to be pointing into the trachea radiologically and the patient was able to pinpoint the area of maximum pain.

This is consistent with findings in other studies where identification of site of impaction is mostly accurate^{3, 5}.

Significant findings on examination revealed pooling of saliva in the oropharynx with neck tenderness on palpation; this is similar to previous studies^{3, 5}. Plain radiograph of soft tissue neck done revealed a pointed radio opaque object in the oesophagus with the pointed end projecting into the trachea, this is consistent with the usual site of impaction of sharp object in the oesophagus⁹. It is surprising that with the presumed anterior extension into the trachea radiologically, no sign of respiratory distress was seen even after three days of impaction.

Emergency oesophagoscopy did not reveal any foreign body, this is similar to migration of sharp object in the oesophagus as reported by Sethi et al¹⁰, where there was an extra luminal migration of impacted fish bone.

Cai et al¹¹ also reported no foreign body was seen on endoscopy in a case of foreign body migration. In our patient delay at surgical intervention due to financial constraints could be accountable for this allowing for migration of the object along the gastro-intestinal tract.

A repeat post operative radiograph showed the radio opaque object in the ascending colon after which the patient was managed conservatively.

It is recommended that conservative management



Fig.I-Lateral view of cervical Spine showing radio-opaque Object at C5-C7.



Fig.II-AP view showing radio-opaque object between C5-C7.

be instituted in almost all instances in which the foreign body has entered into the stomach and serial radiographs done to monitor its progression¹². This was the approach adopted in our patient and the pin was discovered to have migrated to the ascending colon. While some objects may take as long as four weeks to be passed out in the faeces, most objects are passed in four to six days as was the case in the patient presented¹³.

The risk of complications caused by a sharp pointed foreign body in the aerodigestive tract could be as high as 35%¹³. This includes perforation of the oesophagus which has been reported following fish bone impaction¹⁴. Others include Parapharyngeal abscess, para-oesophageal abscess, extrusion of foreign body into the prevertebral space and mediastinum, chest infection, pneumonitis and lung abscesses have all been reported¹¹.

Our patient though swallowed a sharp object accidentally, none of these complications was observed.

In conclusion, this case is bizarre considering migration of a sharp pointed object throughout the entire gastrointestinal tract without perforations along the entire tract despite the delayed presentation. It is important to avoid careless insertion of foreign bodies into the mouth in order to prevent these complications and needless surgery. Even though foreign bodies can be safely removed endoscopically, the best approach is prevention.

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