Wandering pins: case report

Gezintiye çıkılan iğneler: oltu sunumu

Şule Karadayı, Ekber Şahin, Aydın Nadir, Melih Kaptanoğlu

Departments of Emergency Medicine (Assist. Prof. Ş. Karadayı, MD), and Thoracic Surgery (Assist. Prof. E. Şahin, MD; Assoc. Prof. A. Nadir, MD; Prof. M. Kaptanoğlu, MD), Cumhuriyet University School of Medicine, TR-58140 Sivas

Abstract
We present an adolescent girl who swallowed two of turban pins. One of the turban pins was discharged in her stool whereas the other one advanced to the lung during a vomiting period. Sometimes location of foreign bodies as seen on the graphs might be deceptive.

Keywords: Foreign body, adolescent, lung

Introduction
Aspirated turban pins have a high morbidity rate, they are also more problematic than other foreign bodies either in diagnostic or in therapeutic phases [1, 2]. We present an adolescent girl who swallowed two of turban pins, and their amazing course.

Case
A 16-year-old girl admitted to the Pediatric Surgery Clinic with a history of accidentally swallowed turban pins (n=2) six days ago. Turban pins were presumed to be located in the small intestine based on the abdominal graphs (Figure 1a). During her follow-up, she had intense cough after vomiting. On the second abdominal graph (Figure 1b), one of the pins was seen in the lungs, and thus, she was referred to our clinic for investigation of a metallic foreign body. Her physical examination and routine laboratory tests were normal. The pin (Figure 1b, white arrows) was removed from the right lower lobe by bronchoscopy with the aid of fluoroscopy. The other pin was discharged on the ninth day of the event in her stool. However, it was not clear how the pin was regurgitated from such a distant location. Barium studies (Figure 2) showed that she had a gastroptosis. Finally we realized this antithetical route of aspiration.
Figure 1: (A) First and second pins are shown with thick black arrows in direct abdominal graph. (B) First pin moved into the lung (white arrows), second one seemed still in the nearly same location (black arrows) in abdominal x-ray.

Figure 2: Gastroptosis and the pin (# 2) in descendent colon are seen in barium swallowed graph. Lumbar vertebrae (L1, L2, L3), 12th rib and parts of stomach are also seen. (F: fundus, C: corpus, P: pylori).
Discussion

Foreign body aspirations frequently seen in the age group of six months-four years; however turban pin aspiration is common in adolescent girls wearing a headscarf [2]. Similarly, our patient was 16 years old.

Accidently swallowed foreign bodies are usually discharged by stool without any complication [3]. However, foreign bodies in the stomach may lead to complications such as bleeding, perforation, intraabdominal abscess, hepatic abscess, intestinal obstruction and migration to the splenic hilum and liver, which are the most commonly encountered complications [3-5]. To date, only one case with a foreign body advanced to the gastrointestinal system from the lungs has been reported. In that case, the foreign body was lost in the larynx during extraction, and the patient swallowed it [6]. Our report describes is the first reported case of foreign body in the lungs, which was regurgitated by the stomach.

The first direct abdominal graph showed the pins were located in the right lower quadrant. So we think that the pin is either in the distal ileum, the caecum or the ascendant colon. It was surprised that one of the pins was regurgitated from such a distant location. Because, a foreign body in this location must itinerate back for few meters and pass over the iliocecal valve, pylori, and cardio esophageal sphincter. If the foreign body is a pin, completion of the entire course, despite peristaltic motion without sticking to gastrointestinal wall, is nearly impossible.

In conclusion, it should be kept in mind that the location of swallowed foreign bodies as seen on the graphs might be misleading.

References:


