

Turban Pin Aspiration Syndrome: Turban Pin Self-Ejected by Coughing: Case Report

Turban iğnesinin öksürülerek çıkarıldığı turban iğnesi aspirasyon sendromu
Acil Tıp

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Özet

Turban iğnesi aspirasyon sendromu, özellikle turban kullanan islamik kızları etkileyen yeni bir klinik tanımlamadır. Daha öncesinde sağlıklı olan 19 yaşındaki bayan turban iğnesi aspirasyonu tanısıyla acil servis getirildi. anteroposterior ve lateral akciğer grafilerinde radyopak yabancı cisim görüldü. bayan turban iğnesini öksürürken çıkardı. kontrol akc grafisi normal olarak görüldü. Takiplerinde herhangi bir şikayet ve komplikasyon görülmedi.

Anahtar kelimeler: *Turban iğnesi, Kendi kendine çıkarma Öksürük*

Abstract

Turban pin aspiration syndrome is a new clinical entity afflicting young Islamic girls wearing a turban. A previously healthy 19 year old girl admitted to emergency department with turban pin aspiration. Radioopaque foreign material was visualized with posteroanterior and lateral chest x-rays. She self-ejected turban pin by coughing. Repeat chest x-ray appeared normal. There was no complaint and complication during the follow-up.

Keywords: *Turban pin, Self ejected Coughing*

Introduction

Foreign body aspiration (FBA) is a common problem among children or infants¹ and important causes of death². In adults, most of FBAs are seen in the 6th or 7th decade of life when the airway protection mechanism is impaired¹. Turban pin aspiration syndrome is a new clinical entity afflicting young Islamic girls wearing a turban^{3,4}. Turban pins are used for attaching the layers of turban to each other in order to keep it in a steady position around the head⁴. The aspiration history of the turban pins is frequently same in all cases. They hold the pin between teeth while dressing in a turban and aspirating the pin during laughing or talking⁵. Here, we report a young girl who aspirated turban pin and self-ejected by coughing.

Case Report

A previously healthy 19 year old girl admitted to emergency department with turban pin aspiration. She aspirated a turban pin when she tried to talk with the pin in her mouth while fixing the headscarf. She was coughing on admission. Her physical examination revealed no significant abnormality. Radioopaque foreign material was visualized with posteroanterior and lateral chest x-rays (Figure 1). The turban pin was self-ejected by coughing. Repeat chest x-ray (Figure 2) appeared normal and the patient was discharged after 24 hours of observation. There was no complaint and complication during the follow-up.

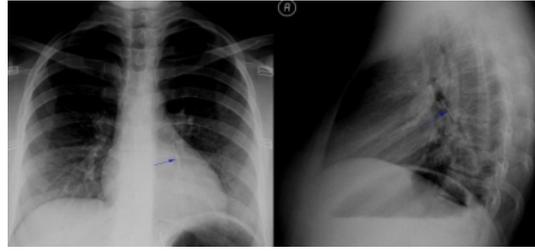


Figure 1

Posteroanterior and right lateral chest X-ray

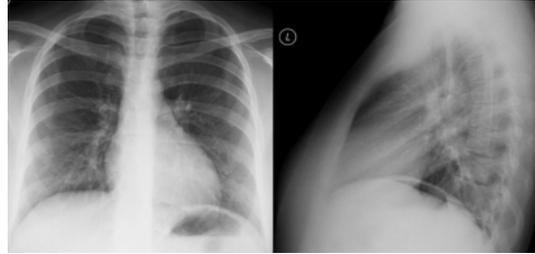


Figure 2

Repeat posteroanterior and right lateral chest X-ray

Discussion

Foreign body aspiration in adults is very rare ^{1,5,6}. In adults most of the FBA's are seen in the 6th or 7th decade of the life ^{1,5} when the airway protection mechanism is impaired ¹. It is a common problem among children or infants ^{1,5,7-9}, emergency room personal ⁸, psychiatric and prison population ⁹. Turban pin aspiration is a new syndrome in Islamic girls wearing turban ^{3,4}. In this case, we reported a turban pin aspiration syndrome in whom the turban pin was located in the left lower lobe bronchus and self-ejected by coughing. Repeat chest x-ray appeared normal. There was no complaint and complication during the follow-up.

To realize the ingestion of a turban pin is as important as aspirating a turban pin. Karaman et al ⁸ reported an 8-year old child who presented with an acute abdomen caused by perforation of the appendix because of an ingestion of safety pin after two days of the ingestion. Mehran et al ⁹ reported a 25-year old girl who presented with a 10 day history of right upper quadrant abdominal pain caused by perforation of the gastric because of an ingestion of metallic pin.

After aspiration, turban pins can go trachea or esophagus. Often goes to the gastrointestinal tract, and exit from the gastrointestinal tract without causing problems ⁷⁻⁹. Exit must be followed up ⁸. Aspiration of turban pin, leads to complications according to the localization. Gastrointestinal perforation due to turban pin can cause appendicitis, intestinal perforation, intestinal obstruction ⁷, fistula ^{7,8}, bleeding ^{7,8}, peritonitis, abscess ⁸. If you are aware of the ingestion, we provide early diagnosis and intervention. Radioopaque inorganic materials like turban pin aspirations are easily diagnosed and localized with posteroanterior and lateral chest x-rays ^{1,6}.

The most common localization is trachea (42%) in Ilan et al ³ report, right bronchial system (62 %) in Uçan et al ⁵ report and intermediate bronchus (62 %) in El-Khushman et al ¹⁰ report. Varies methods of treatment are: rigid bronchoscopy, flexible bronchoscopy, laryngoscopy, thoracotomy ¹. Ilan et al ³, reported 26 turban pin aspiration syndrome, treated by rigid bronchoscopy, fluoroscopy-assisted rigid bronchoscopy, thoracotomy. One patient self-ejected the turban pin by coughing before bronchoscopy. Hasdiraz et al ⁶, reported 105 turban pin aspiration syndrome, treated by laryngoscopy, flexible fiberoptic bronchoscopy, rigid bronchoscopy, thoracotomy. One patient spontaneously expectorated the turban pin. This case is the third patient in the literature who self-ejected the turban pin by coughing. Çobanoğlu et al ² reported 21 turban pin aspirations in female children aged below 18

years. They used rigid bronchoscopy in 15 (71.4%) cases, thoracotomy in three (14.3%) cases, laryngoscopy in one (4.8%) case and fiber-optic bronchoscopy in two (9.6%) case for the removal of the needles. Turban pins were located in the right bronchial tree in 12 (57.1%), in the left bronchial tree in three (14.3%), in the trachea in five (23.8%) cases and in the larynx in one (4.8%) case. Eight (38.1%) cases lived in a rural area and 13 (61.9%) were urban.

Conclusion

With the increasing use of Islamic headscarves in the country, especially in young girls the frequency of turban pin aspiration occurrence has increased. We recommend safer methods such as the use of adhesive tapes and snap fasteners and to avoid holding the needles with the lips. Clinicians should be aware of this new aspiration syndrome, its method of diagnosis and extraction techniques.

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Information Presentation

This case report was presented as a poster at the 1st Intercontinental Emergency Medicine Congress, 15-18 May, 2014, Antalya, Turkey.