Case Reports

Turban pin aspiration syndrome: a new form of foreign body aspiration

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Introduction

An interesting type of foreign body aspiration (FBA) has recently appeared in Turkey, in parallel with the increased use of turbans among women. Turban pins (all of which had a pearl head, Plate 1) have been aspirated, whilst dressing in a turban.

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Forty-seven women were admitted to the five centres mentioned above between 1988–1994, suffering with aspiration of a turban pin. The mean age of the patients was 14.9 ± 2.6 years (range 11–24 years). The history was almost the same in all cases; holding the pin between the teeth whilst dressing in a turban and aspirating the pin during laughing or talking. In all cases, the distal end of the FB was the pearl head of the pin. Bronchoscopic evaluation revealed that 2% of the foreign bodies were in the trachea, 62% in the right and 36% in the left bronchial systems, 15% in the right main bronchus, 2% in the upper lobe bronchus, 20% in the intermediary bronchus, 2% in the middle lobe bronchus, 23% in the lower lobe bronchus, 8% in the left upper lobe bronchus and 28% in the lower lobe bronchus. In five cases, a flexible bronchoscope was used to retrieve foreign bodies while a rigid tube was used in the other cases under general anaesthesia. In two cases, a rigid tube could not reach the peripheral location and removal was performed using a flexible bronchoscope. Repeated bronchoscopies were not successful in two cases and thoracotomy was performed. The pin was removed by bronchotomy in one case, while the other patient whom had bronchiectasis underwent lobectomy.

Foreign body aspiration is seen frequently in the age group between 6 months and 4 years. It is very rare in adults and most cases occur in patients with geriatric, psychiatric and neurological diseases. Many of the published paediatric and adult studies show male predominance, but this study was of young women wearing turbans, who were all healthy prior to the aspiration (1).

There have been other studies of FBA in Turkey: Öktem et al. (1968) reported FBA in 123 cases, Aytac et al. (1977) in 500 cases and Paşaoglu et al. (1991) in 822 cases. In these studies, the foreign bodies were mainly organic materials such as sunflower seeds, watermelon seeds, hazelnuts and beans, and, less frequently, inorganic materials such as metallic dentures and sewing needles. None of these reported turban pin aspiration (2–4).
This new aspiration syndrome seems to correlate with the increased number of women wearing turbans. In 1993 and 1994 (respectively), Cikrikoğlu et al. reported seven turban pin aspirations and Akçalı et al. reported 12 turban pin aspirations (5,6).

In the authors’ centres, it has been calculated that turban pins comprise 24–86% of all foreign bodies aspirated. In the present study, as in other studies, all pins were found ‘head down’ in the bronchial system because of holding the pearl head of the pin inside the mouth. The rigid tube bronchoscope was used in many of the patients, and the flexible bronchoscope was used less frequently.

This study reports an interesting form of FBA in Turkey. To the authors' knowledge, no papers have been published in the English literature on this subject from the other Islamic countries. Also, there were no reports on this matter before 1980 in Turkey. These findings may be explained by changing and increasing use of turbans.

References