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An unusual foreign body in the larynx

S. HAMMERLIN, Ph.D., R. KAPADIA, F.R.C.S., D.L.O.

Abstract
A case of a needle lodged in the larynx is reported. The needle had been inhaled via an asthma inhaler.

Key words: Foreign body; Larynx; Needle; Nebulizers and vaporizers

Introduction

Foreign bodies in the larynx are uncommonly seen, as they are usually either lodged in the hypopharynx or go past the glottis into the bronchus.

A case is presented where the mode of entry and the site of impaction was felt to be interesting and has not been reported previously.

Case report

A 42-year-old male with a history of asthma and seasonal allergies presented to the ENT Department with severe pain in the throat and inability to swallow after accidentally inhaling a sewing needle via his asthma inhaler. The needle which was originally stuck through a piece of paper in the same pocket of his jacket as the inhaler slid into the top of the inhaler and was inhaled with the first puff. He was only able to whisper, but breathing was not impaired and he did not have stridor.

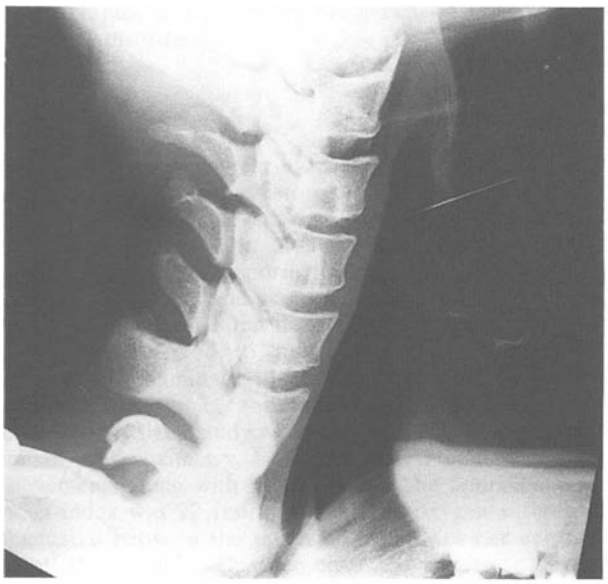

FIG. 1
Lateral soft tissue radiograph of neck with the sewing needle at the level of the glottis.

The needle was not visualized by either indirect or direct fibreoptic laryngoscopy, although a good view of the larynx was obtained. The left vocal fold appeared bruised and had impaired mobility. The needle was clearly visible on the antero-posterior and lateral soft tissue X-rays (Figures 1 and 2), pointing anteriorly at the level of the laryngeal entrance.

The patient was therefore taken to theatre. The foreign body was not seen on direct laryngoscopy, so the patient was then intubated and endoscopy carried out. After an initially unsuccessful bronchoscopy and laryngoscopy the

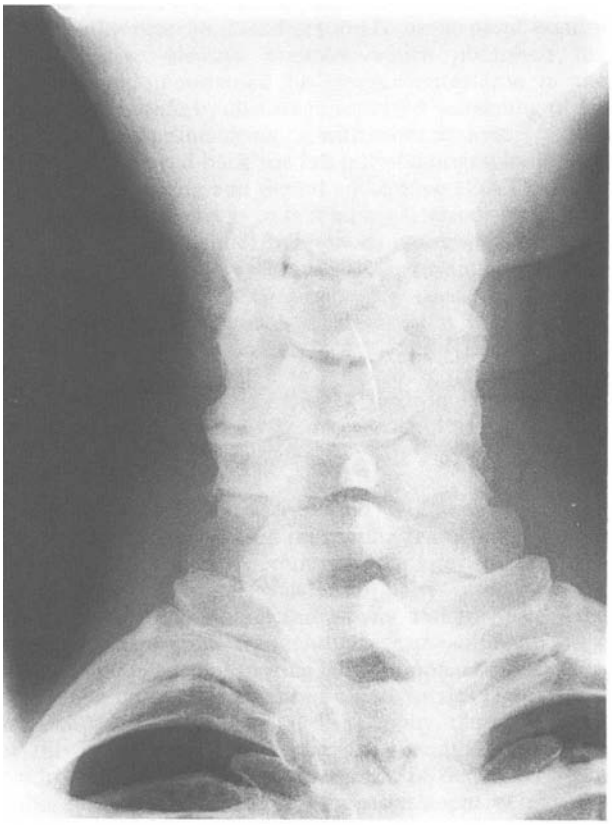

FIG. 2
A radiograph of neck showing the needle at the level of the larynx.

From the Department of Otolaryngology, Lister Hospital, Stevenage, Herts, UK.
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3.5 cm needle was eventually located in the inter-arytenoid region where it was lodged submucosally, protruding into the hypopharynx from where it was removed. The severe bruising and haemorrhage in the left vocal fold was confirmed; there was no narrowing of the airway.

Post-operatively the patient was observed overnight on the intensive care unit and discharged home after his uneventful recovery. Eight weeks later the vocal fold had recovered completely and had resumed normal function.

Discussion

Considering the widespread use of asthma inhalers there have been few reports of inhaled foreign bodies. So far there have been reports about coins (Hannan *et al.*, 1984) and game pieces (Bell *et al.*, 1991). It is important though to realize that the mode of entry into the inhaler was always via the mouthpiece if the inhaler was not correctly recapped after use. Hannan *et al.* (1984) experimented with different sized coins and measured ejection on conventional usage, which showed that almost all available inhalers can accommodate and eject foreign bodies from their mouthpieces. Correct recapping and storage of the inhalers should reduce those risks. This is the first report about entry via the cartridge end of the inhaler; which does not have a protective cover in most inhaler models. We repeatedly inserted a needle into the inhaler, after shaking it gently a few times the needle always fell out via the mouthpiece. Although a needle is rarely carried in the same pocket or handbag as an inhaler, it cannot be ruled out that other small objects such as small paperclips could take the same route. It has been recommended that inhalers be held several centimetres away from a widely opened mouth during use, but the patient should also be strongly advised to carry their inhalers in a safe place and inspect the mouthpiece before use.

References

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Address for correspondence:
Dr Sabine Hammerlin,
ENT Department,
Lister Hospital,
Stevenage,
Herts SG1 4AB.