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CASE REPORT

An Unusual Migrated Foreign Body

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ABSTRACT

Besides infections, foreign body incidences are amongst the most frequently encountered pathologies in otorhinolaryngology. Ingested foreign bodies which migrate extra-luminally are rare occurrences, which if untreated, result in life threatening complications. We present here, a case of a sharp metallic wire which migrated from the hypopharynx and lodged in the soft tissue of the neck. It was successfully removed via neck exploration and the patient recovered well.

Keywords: Migrated Foreign body Neck

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Introduction

The diagnosis and treatment of foreign bodies are a challenge for the otorhinolaryngologist. In literature, various cases have been described, where foreign bodies which have been ingested and have lodged in the upper aerodigestive tract, but only a few of these foreign bodies have perforated the oesophagus and only an even

smaller number of these has migrated extraluminally [1]. The term "migratory foreign bodies" has been coined for such cases.

There have been rare cases which have been reported, in which foreign bodies actually enter through a puncture wound in the skin of the neck [2]. If untreated, they may result in life threatening suppurative or vascular complications [3]. The specific nature of the symptoms of course, is very helpful in localizing the site of the foreign body

A finding of laceration, oedema or ulceration on direct laryngoscopy and oesophagoscopy, should raise the level of suspicion of a perforating foreign body [4]. The X-ray C-arm is an important tool for localizing a perforating foreign body in the neck.

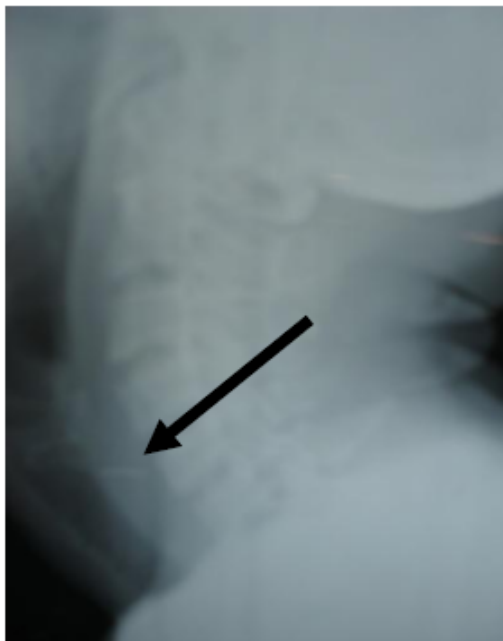
Exploration of the neck via an external approach to remove the foreign body is the recommended treatment.

Case Report

We report the case of a 35 years old lady who presented to the otorhinolaryngology department with the complaint of accidental ingestion of fish bone of 4 days duration. She also complained of fever and odynophagia. On examination, the vital parameters were found to be normal. The general conditions were satisfactory. Oral cavity and oropharyngeal examination was normal.

Indirect laryngoscopy revealed fullness in the left pyriform fossa, with congestion of the lateral wall, but with no evidence of pooling of the saliva or foreign bodies. The laryngeal inlet and the vocal cords were normal. The neck movements were painful, but not restricted. There was no sign of trauma or swelling in the neck, except for localized tenderness on the left side. Laryngeal crepitus was present.

The systemic examination was normal. The patient was investigated. Lateral soft tissue radiograph of the neck showed a radio opaque shadow of 1 cm length, suggesting a foreign body at the level of the C4 – C5 vertebra (Fig 1).

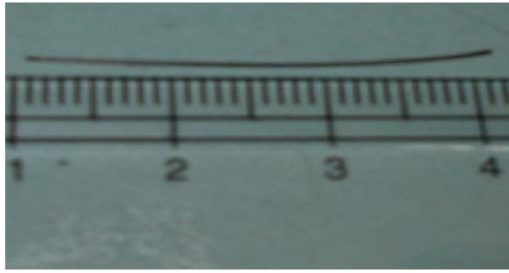


Table/Fig 1: Lateral soft tissue radiograph of neck

The X-ray of neck in anteroposterior view showed the radioopaque shadow of about 3.8cms long lying horizontally at the level of C3 – C4, which was suggestive of penetration (Fig 2). Direct laryngoscopy performed under general anaesthesia revealed injury along the lateral wall of the left pyriform fossa, with minimum pus. There was no evidence of foreign bodies in the hypopharynx or in the upper oesophagus. The presence of a foreign body lateral to the lumen was confirmed using the C-arm. Exploration of the neck was performed. The foreign body could not be visualized with naked eyes. Hence, C-arm guidance was used to locate the foreign body and it was successfully removed. The foreign body was surprisingly found to be a metal wire. The patient gradually improved during the postoperative period and became asymptomatic.



Table/Fig 2: Foreign Body lying horizontal at the level of C3 – C4



Table/Fig 3: Foreign Body (4 cms long Metallic wire)

Discussion

Our patient came with a history of fish bone ingestion. On removal, the foreign body was surprisingly found not to be a fish bone, but it was a metallic wire. The patient was totally unaware of swallowing a metallic wire. We assume that the metallic wire must have been used to dry the fish or must have been there in the cooked rice that she had consumed with fish.

Ingested foreign bodies are usually found intraluminally. A majority of ingested foreign bodies pass through the gastrointestinal tract uneventfully. Most of the foreign bodies which are ingested get impacted in the tonsils or at the base of the tongue or the vallecula and can be easily removed. The number of ingested foreign bodies that perforate into the aerodigestive tract is small and an even smaller number of foreign bodies migrate to the extraluminal tissues. [1]

In some instances, the foreign body can migrate completely through the oesophageal wall and can become impacted in the soft tissues of the neck [8]. 'Migrating foreign bodies' is the term which is used for such cases. In the Remsen et al series, 321 cases of penetrating foreign bodies were reviewed from literature and only 43 were found extraluminally [9]. They found that the sharper the foreign body is, the higher the risk of penetration. Chee and Sethi reported a series of 24 migrated foreign bodies in the neck. All of the foreign bodies in their series were sharp and linear [6].

The risk of penetration is also influenced by the orientation of the foreign body. Horizontally oriented foreign bodies are

more likely to penetrate. Within the ENT sphere, typically fish bones have been reported to cause neck abscesses [5]. The migration through the entire pharyngeal wall, ending in a superficial cervical abscess though uncommon, has to be considered [6, 7]

Foreign bodies might penetrate adjacent visceral structures such as the thyroid gland. They can also penetrate major blood vessels in the neck and precipitate vascular complications such as aorto-oesophageal and innominate oesophageal fistulae and carotid rupture [9].

A foreign body should be suspected to have migrated extraluminally when pharyngoscopy/oesophagoscopy fails to identify a foreign body and when X-ray confirms that it is still in the neck [4]. Endoscopic findings of ulceration, oedema and laceration should lead to the suspicion of migration. Management involves the exploration of the neck by an external approach. In practice, this is often a difficult task. The main difficulty is the localization of the foreign body in the soft tissue, after which removal is usually simple.

The systematic exploration of the neck via an external approach by using the C-arm as a guide was used in the present case and the foreign body was removed successfully.

Many studies on migrated foreign bodies have suggested the use of CT scan to localize the foreign body and to estimate the extent of the damage done. [10, 1, 4]

The position of the head and neck at surgery may be different from that when CT scan was done, as the soft tissues of the neck are mobile with respect to the bony and cartilaginous structures. The foreign body at surgery may not be located exactly where it was shown to be in the CT scan [11]. We, have therefore recommended the use of the C-arm to localize the foreign body in the neck intraoperatively.

References

- [1] Sreetharam SS, Prepageram N, Satwant S. Unusual migratory foreign body in neck. Singapore Med J. 2004; 45 (10):487.

- [2] Sethi DS, Stanley R) Migrating foreign bodies in the upper digestive tract. *Annals Academy of Medicine Singapore* 1992; 21:3
- [3] Connolly AA, Birchall M, Walsh GP, Moore – Gillon V. Ingested Foreign bodies; Patient guided localization is useful clinical tool. 1992; *Clinical otolaryngology, Allied Sci* 17: 520 -524.
- [4] Vadhera R, Gulati. S.P, Garg. A, Goyal. R, Ghai. A, Extraluminal hypopharyngeal foreign body. *Indian Journal of otology Head and Neck Surgery.* 2009; 61; 76 – 78.
- [5] Nusbaum A.O, Som P.M, Rothschild. M.A, Sheegar. J.M. Recurrence of a deep neck infection. A clinical indication of an underlying congenital lesion. *Arch Otolaryngology Head Neck Surgery.* 1999; 125; 1379 -1382.
- [6] Chee L.W., Sethi. D.S, Diagnostic and therapeutic approach to migratory foreign bodies. *Ann Otol Rhinol Laryngol.* 1999; 108; 177 – 180.
- [7] Barzilal. G, Braveman. I, Karmell. R, Greenberg. E. How did it get there? A coiled metal foreign body in an unusual cervical position. *Otolaryngology Head Neck Surgery.* 2001; 124; 590 – 591.
- [8] Goh. Y. H, Tan. N.G, Penetrating oesophageal foreign bodies in the thyroid gland. *J Laryngol otol.* 1999; 113; 769 – 71.
- [9] Remsen.K, Lawson. W, Biller. H.F, Som. M.L, Unusual presentation of penetrating foreign bodies of upper GIT. *Ann otol Rhinol Laryngol supp.* 1983; 105: 32 – 44.
- [10] Zohra. T, Kram. I.M, Iqbal. M, Akhtar. S, Abbas. S.A, Migrating foreign body in the thyroid gland an unusual case. *J Ayub Med Coll Abbottabad.* 2006; 18:65-66
- [11] Lu. P.K., Brett.R.H., Aw.C.Y., Singh. R., Migrating oesophageal foreign Body – an unusual case; *Singapore Med J* 2000; 41:77 – 79.