# **MIGRATING FOREIGN BODY IN THE NECK – A CASE REPORT**

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#### **Abstract**

Keywords: Foreign body; cervical region;plain radiography; USG; CECT.

Foreign bodies in the neck sometimes can find a space for migration if the edges are sharp. These can change the location because of the potential soft tissue spaces available in cervical region. We present 38 years-old male who reported with the swelling on the upper left side of the neck which has increased in size for over one month period. There was one month back history of swallowing a fish bone piece. Plain radiography, Ultrasonography (USG) with color Doppler and Contrast Enhanced Computerized Tomography (CECT) helped in clinching the diagnosis by locating the exact place of the foreign body.

### **INTRODUCTION**

The patients with foreign body ingestion frequently report to the otolaryngology department. These foreign bodies migrate from the original place to the distant places. The cervical region is the most vulnerable region as the sharp edge can penetrate and be lodged in soft tissue spaces of the neck [1].

## **CASE REPORT**

38 years-old male person reported to the outpatient department of otolaryngology and head and neck with the swelling in the upper part of the left side of the neck (Figure 1).Patient had the history of swallowing of a fish bone four weeks ago .There was a little discomfort in the throat in beginning but settled to some extent with symptomatic treatment. Patient was not fully recovered of the complaints of foreign body sensation and reported to the ENT outpatient department.



Figure 1.Photograph of 38-years old male who presented with pain and neck swelling on left side. There is soft tissue swelling (arrow) without any superficial ulceration.

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This swelling had increased for the last over one month. There was history of accidental swallowing of the fish bone one and half month back. He felt the feeling of something stuck in his throat at that time. He developed hoarseness subsequently which is still persisting. Locally there is soft and non reducible swelling in the left upper lateral part of the soft tissue of the neck. There was slight local tenderness at the swelling site .Laryngoscopic examination was unremarkable. Plain X-ray Cervical region antero-posterior and lateral views were taken .Only lateral view revealed a linear hyperdensity shadow extending antero inferiorily from the level of the cricoids cartilage (Figure 2 a and 2b).



Figure 2.Plain X-ray Cervical region.(a) AP and (b) Lateral views.AP view is unremarkable because of overlapping bony shadows. Lateral view shows a high density linear radiopaque shadow (arrow) crossing tangentially over the tracheal air lucency.

Ultrasound and color doppler were carried out which revealed hyperechoic foreign body with distal shadowing in the soft tissue in the neck (Figure 3a and b)



Figure 3.Ultrasound and color Doppler of the neck region.(a) axial and (b) sagittal images.Hyper echoic structure with distal shadowing seen in both views (arrows).No vascularity was noticed in the surrounding region.

CECT of the neck has revealed and confirmed the location of the foreign body (4a, b and c)

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Patient underwent surgical removal of the foreign body and recovered uneventfully.



Figure 4.CECT Neck region.(a) Axial section shows the high density shadow in the superficial soft tissue of the neck (arrow).(b) Sagittal reformatted image delineates the linear high density opacity projecting in the superficial neck tissue (arrow).(c) Coronal reformatted image shows the same high density vertical linear opacity in the soft tissues (arrow.)

### DISCUSSION

Otolaryngologists frequently come across the foreign bodies in the hypopharynx and cervical oesophagus in their daily practice. The foreign bodies lodged superficially in the tonsils and pyriform fossa can easily be removed by direct laryngoscope but not the deep one located in the soft tissue of the neck. The migration of foreign body after penetrating the oesophagus to the extra luminal location is though rare but not uncommon. These can remain quiescent till the patient present with some symptoms. These can be removed endoscopically if the exact location and diagnosis is confirmed. This can lead to the formation of the neck mass for which the diagnosis at times becomes difficult. Many complications can take place in the formation of dangerous aorto-oesophageal fistulas. Other complications can also take place in the form of retropharyngeal abscess and sialadenitis. Plain radiography is the initial diagnostic tool to see the location of the foreign body as it was in our present case. Remson et al has presented the largest series of these types of migrating foreign bodies [2]. This may lodge in the thyroid gland and can cause diagnostic problem. The role of ultrasound in the diagnosis and in the intraoperative procedure is very important. The convenience of the intraoperative ultrasound probes are the best in the guidance for the surgery. The easy availability of US and without any radiation makes it proffered first line management modality [3]. The role of CECT scan is of paramount importance as the anatomical details are required before the surgery. The 3D reconstructive images will decide of the surgical approach. [4].

### CONCLUSION

The migratory foreign body in the soft tissue neck is a diagnostic chellenge. The detailed history is important in these cases. Though plain x-ray of cervical region is first to be taken but CT scan is the modality of choice to delineate the site and the associated complications if any.

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#### REFERENCES

1. Vadhera R, Gulati SP, Garg A, Goyal R, Ghai A. Extraluminal hypopharyngeal foreign body. Indian Journal of Otolaryngology and Head and Neck Surgery 2009;61:76-8.

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2. Remson K, Lawson W, Biller HF, et al. Unusual presentations of penetrating foreign bodies of upper aerodigestive tract. Ann Otol Rhinol Laryngol 1983; 105:32-44.

3.Ng SY,Sangra AK,Bradley PF.A new approach using intraoperative ultrasound imaging for the localization and removal of multiple foreign bodies in the neck.Int J Oral Maxillofac Surg 2003;32:433-6.

4.Lue AJ,Fang WD,Manolidis S.Use of plain radiography and CT scan to identify fish bone foreign bodies.Oto laryngol Head Neck Surg 2000;123:435-8.

### **CONFLICT OF INTEREST**

Nil

### HOW TO SITE THIS ARTICLE

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