UNCOMMON PRESENTATION OF UNNOTICED EMBEDDED FOREIGN BODY NECK: A RARE CASE REPORT
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ABSTRACT: In a case of foreign body usually history will be suggestive and guide ENT surgeon towards diagnosis. When there is no history of foreign body ingestion or penetration, it is in nobody's view of diagnosing a foreign body. We report a case of foreign body neck in a female patient aged about 30yrs, who presented with neck swelling without any history of foreign body ingestion or penetration externally. On exploration a foreign body wire piece was removed. This case of embedded foreign body is considered as uncommon and presented as rare case.

KEYWORDS: Neck swelling, embedded foreign body, wire.

INTRODUCTION: Penetrating foreign bodies (FBs) in the neck commonly presents at the time of penetration injury or trauma to the emergency department. All penetrating neck injuries carry potentially dangerous risks and require emergency treatment.¹ Sharp penetrating FBs in the neck has a special apprehension because of the constellation of the vital structures in the neck.² Sharp metallic FBs embedded in the tissues also pose a potential risk of injury for the surgeons.¹ But when the FB penetration is unnoticed by the patient, they will seek medical attention until the complications like FB reaction, swelling or abscess occur. We report such a case of unnoticed sharp metallic embedded FB presented as a swelling in the neck, which was detected incidentally by x-ray of neck.

CASE REPORT: A female patient aged about 30yrs came with complaints of swelling on the left side of neck 20 days duration, to the OPD of ENT, Mahatma Gandhi Memorial Hospital, Warangal, Telangana. There was no history of pain, fever, foreign body ingestion, and penetrating injury. On examination swelling was 3x3 cm swelling to the left side of the neck in lower part, along the line of sternocleidomastoid muscle, soft to firm in consistency, little tender, with minimal signs of acute inflammation. The swelling was not moving in any direction, on deglutition and on protrusion of tongue. History was repeatedly asked about foreign body ingestion or any kind of trauma. FNAC was reported as a inflammatory swelling and inconclusive. The X-ray neck was showing, a thin wire like foreign body (Figure1). Ultrasonography was not showing foreign body and reported as an abscess, or myositis in sternocleidomastoid muscle, Colour Doppler shows no abnormal vascularity. X rays were repeated after consulting radiologist to rule out any artifacts, but repeat X-rays were showing the same. CBP, CUE, ESR, RBS, Blood urea, Sr.creatinine were normal. HIV was non-reactive, HBSAg was negative. Direct laryngoscopy was normal, no ulcer or growth was seen. Upper GI endoscopy was also normal and no foreign body was seen endoscopically. With a diagnostic dilemma the patient was posted for exploration and I&D under local anaesthesia, As soon as an incision was given and the wound opened (Figure2), a small wire piece (Figure:3) about 2.5 cm length found and removed. Post-operative period was uneventful.
DISCUSSION: An embedded foreign body in the neck is a rare and even if it is found usually it is possibly can be:

1. Migration of ingested foreign body into the neck.
2. Self-embedding foreign body.
3. Direct penetration of foreign body through an entry wound externally.

A migrated foreign body is diagnosed in a patient with history of foreign body ingestion, and a negative endoscopy and a positive radiology finding. Ingested foreign body may migrate in to the soft tissues of the neck\(^3\) may even into the mediastinum\(^4\) Commonly migrated foreign bodies are fish bones, needles, wires, hair pins etc.\(^5-6\) The mechanism of migration is thought to be due to movements of muscles of neck and viscera during voluntary or involuntary movements.\(^7\)

In this case though Direct laryngoscopy, and Eosophascopy were negative and radiography is positive, as there is no involvement of deep vessels,\(^8\) penetration of thyroid gland\(^9\) and no evidence of injury to deeper structures, is against the possibility of migration of foreign body.

The diagnosis of other possibility of self-embedded foreign body is based on psychiatric illness. The age group usually in non-suicidal self-embedding foreign bodies is between 13 to 15 yrs,\(^10\) and in suicidal self-embedding foreign bodies is between 15 to 17 yrs.\(^11\)

In this case the age of the patient is 30 yrs and the mental status of the patient appears to be normal, and there is no history of any psychiatric treatment which rules out the possibility of self-embedded foreign body.

Coming to the possibility of penetrating injury, these injuries consist of 5-10% of all trauma cases.\(^12\) Though there is no history of penetrating injury, the patient being a labourer, foreign body being a wire, sharp end and needle like, and on exploration foreign body being superficial, the possibility of unnoticed penetration and embedding of foreign body is most possibilities in this case.

The foreign body being a wire, sharp object the entry wound would have been closed spontaneously.

The absence of acute signs of inflammation may be because of usage of antibiotics.

Though X-rays shows a foreign body in the neck, ultrasonography did not revealed any foreign body. The swelling being in the line of sternocleidomastoid muscle and not freely mobile an abscess or myositis was suspected leading to confusion in diagnosis clinically. Radiological examination should be offered before management of all neck wounds and neck swellings.\(^13\)

Finally exploration gave us the diagnosis and treatment solution for the case, which gave a thought to present this case as "Uncommon Presentation of Unnoticed Embedded Foreign Body of Neck".

CONCLUSION: In most of the cases foreign body becomes apparent at the time of injury itself, and removed immediately, if presents later with swelling or abscess at least they may give history of penetrating injury, but in this case there was no history of penetrating injury. It is advised that if patients presenting with neck swellings and having diagnostic dilemma, better to evaluate thoroughly clinically and radiologically. Unusual presentation of unnoticed embedded foreign body in the neck before being diagnosed encouraged us to report this case.
CASE REPORT

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CASE REPORT

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