



**FOREIGN BODY BREAST- HYPODERMIC NEEDLE EXTRACTION USING RADIOGUIDED OCCULT LESION LOCALISATION (ROLL) TECHNIQUE**

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**ABSTRACT** Foreign bodies in soft tissues can be present as an asymptomatic entity and can also present a variety of inflammatory, allergic and infectious complications such as formation of foreign body granulomas, pyogenic abscess, chronic discharging wound. So foreign body in soft tissue warrants immediate surgical retrieval. We report here a female patient who was admitted to our hospital with a foreign body in her left breast. The ROLL technique was used for the extraction of the foreign body.

**KEYWORDS :** Foreign Body Breast , Hypodermic Needle , ROLL Technique

**INTRODUCTION :**

Penetrating injuries and suspected retained foreign bodies appear quite often in Surgical Department. The most common foreign bodies are pieces of glass, lead shot and other metallic objects have also been reported. Most of the time foreign bodies are picked up in initial clinical examination and requires radiological tools to clinch the diagnosis. Identification of foreign body is important as it can cause serious infectious and inflammatory complications. In Breast most common foreign bodies are surgical clips and fragments of hook-wires left after surgical excisional biopsies. Here we report a case of iatrogenic foreign body – Hypodermic needle in the breast. As per Global literature and to the best of our knowledge this is the first reported case of hypodermic needle being found as foreign body in the breast.

**CASE REPORT :**

A 25 year old female was admitted with complaints of pain in her left breast for the past one year, which was pricking type of pain. She also had history of low grade fever on and off for the

past one year. she had two episodes of abscess drainage at her native place using various needles by a quack. On examination there was mild tenderness all over the left breast. No other significant findings were noted. Routine blood investigations were within normal limits. Chest Xray showed a thin linear object in the left chest. Patient was subjected to 320 slice CT of Chest which revealed a linear metallic foreign body within the glandular tissue of left breast and measuring 3cms in length and 3mm in diameter, located in the third intercostal level. Patient and her attenders were well explained about the disease and its treatment. Patient was proceeded with surgical exploration of the foreign body along with intraoperative ROLL techniques and C – ARM guidance. A circum areolar incision was made and slow dissection carried out, probe was kept on the outer surface marking and exact position of the needle tracked using C – ARM and the area containing the foreign body was exposed, Hypodermic Needle was found embedded in the third inter-costal space and was removed carefully into.

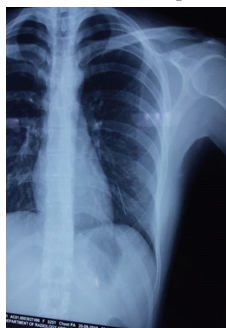


Figure 1

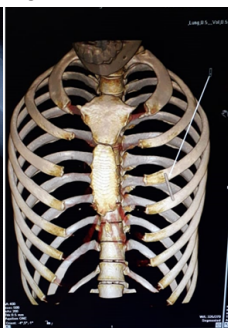


Figure 2

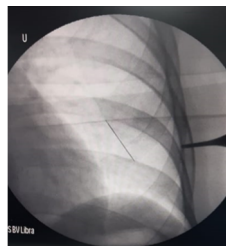


Figure 3

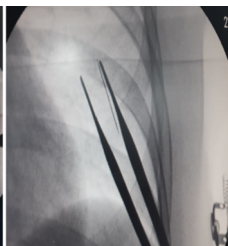


Figure 4

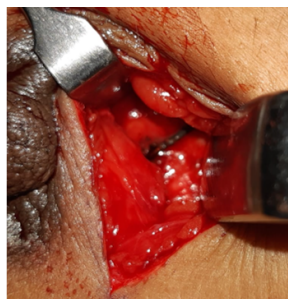


Figure 5

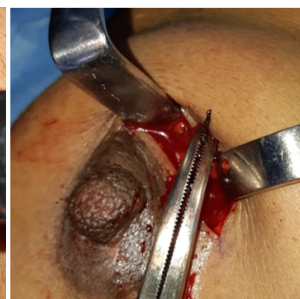


Figure 6



Figure 7



Figure 8



**Figure -9**

- Figure 1:** Chest X Ray Showing Foreign Body  
**Figure 2:** 3d Reconstruction Of Ct Chest Showing Linear Metallic Foreign Body In 3rd Ics  
**Figure 3,4 :** Roll Technique With C-arm Identifying The Needle  
**Figure 5,6,7:** Removal Of Foreign Body From The Left Breast  
**Figure 8,9:** Extracted Foreign Body Hypodermic Needle

#### DISCUSSION :

Iatrogenic foreign bodies are rare incidents. In breasts, commonly seen foreign bodies are surgical clips and fragments of localization hook-wires left during the course of surgical excisional biopsies. According to Montrey et al (3) the frequency of retained wire fragments is 0.2%. These foreign bodies can be asymptomatic and could be picked up incidentally in mammogram which can mimic microcalcifications (2) or can be asymptomatic as in our case. Swallowed Foreign bodies migrating to a solid organ is rare but incidence of these foreign bodies in liver, kidney, IVC, portal vein, psoas muscle, abdominal wall, heart, lumbar vertebra and spinal cord have been reported in literature. Similarly E Y Elverici et al (4) have reported a case of ingested foreign body migrating to the breast. In our case the needle was broken from its hub and had got stuck and embedded in the third intercostal space, which could have also migrated to other organs as mentioned earlier. In a recent study it has been found that most of needle breakage are associated with instillation of local anaesthesia during Dental procedures. LR .Soares et al (5) have reported a case with multiple sewing needles in the breast. Several techniques have been reported in literature for retrieval of foreign body. Aydogan .F et al (6) used the ROLL technique which is used for excision of non palpable breast lesions to retrieve a foreign body from the breast. In our case we used C-Arm guidance for positioning the needle and extracting it into. Pre-operative radiological investigations like X-ray, Ultrasound, CT scan are crucial in identifying and localization of the foreign body and help in removal.

#### CONCLUSION :

Foreign body in any part of the body should be removed as and when diagnosed as it can lead to various complications such as abscess formation, granuloma, and migration to other organs. As in our case it could have migrated from breast into thoracic cavity or other organs. Foreign body in any part of the body is like finding a needle in a haystack as it is very difficult for the surgeons to retrieve without proper localization. Radiological tools such as X-RAY, USG and CT help in pre-operative localization and useage of ROLL techniques with C-ARM help in removal of these foreign bodies.

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