

Bizarre foreign body of the breast secondary to gender-based violence

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Summary

Foreign bodies (FBs) are routinely introduced into the breast for surgical intervention. A bizarre FB of the breast may result from physical trauma secondary to abuse. We report on a 34-year-old female who presented with a metal FB in the right breast and a suspicious history, which raised concern for gender-based violence (GBV). Traumatic breast injuries are relatively rare. A high index of suspicion is important when dealing with unusual breast injuries in order to investigate these appropriately and rule out abuse.

Keywords: foreign body, bizarre, gender-based violence, breast trauma

Case report

A 34-year-old woman was admitted for elective excision of a foreign body (FB) in the right breast, 18 months after sustaining an injury to the right breast. She initially presented to a local clinic complaining of a painful right breast lump. This was preceded by a history of trauma to the right breast several months previously. She reported that after alcohol consumption with her brother, he began to chase her playfully. As she ran towards an open door, her brother allegedly pushed her into the door, causing the metal door handle to penetrate her right breast. The handle broke off and was retained in her right breast. She reportedly only noticed the injury the next day on sobering up but did not immediately seek medical attention. The patient denied any form of abuse as the cause of the injury and maintained that the incident was purely accidental.

The nurses at the clinic did not believe her report nor did they suspect any foul play. The breast lump was treated as an abscess with antibiotics and analgesia. Six months later she presented again with the same complaint and was referred to our institution.

On physical examination, a firm mass with irregular margins measuring 3 x 2 cm was palpated in the right upper inner quadrant (RUIQ). No skin or nipple involvement was noted. The mass was considered suspicious for a breast malignancy. An ultrasound examination of the breast demonstrated an ill-defined RUIQ mass. No calcifications, cysts or concerning axillary lymph nodes were noted. Mammography demonstrated a long, thick intramammary FB and no other suspicious lesions. The mass was classified as a benign category 2 study according to the American College



Figure 1: Chest X-ray showing foreign body in right breast

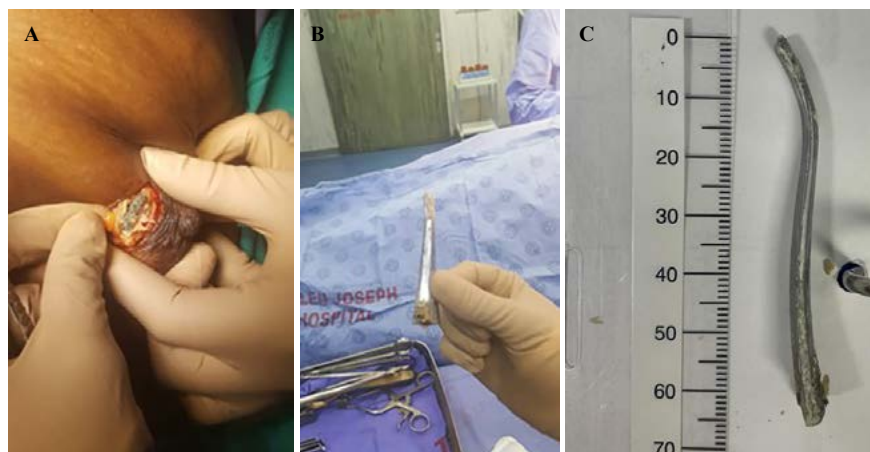


Figure 2: Stainless steel door handle foreign body

of Radiology Breast Imaging-Reporting Data System (BI-RADS). The FB was best visualised on a plain chest radiograph (Figure 1). At surgery, the FB was excised from the right breast via a 2 cm superior circumareolar incision. The distal part of a metal door handle measuring 6.5 x 1 x 1 cm was removed from the breast (Figure 2A–C).

She was discharged with analgesia and dry dressings on the same day as the procedure and instructed to return 10 days later for wound review. She declined social work or psychological intervention.

Discussion

Common breast FBs are those introduced for pre- and post-operative surgical localisation or for cosmetic augmentation. In some cases, surgical material (e.g., markers/clips transected localising wires, surgical swabs or biopsy needle tips) may unintentionally be left in the breast following diagnostic or therapeutic procedures.^{1,2} Bizarre, non-iatrogenic FBs of the breast are uncommon and may be introduced as a result of physical trauma,³ such as gender-based violence (GBV), or may be self-inflicted in patients with psychiatric disorders.³ These injuries are often incidentally found during routine mammography.⁴ Occasionally, a FB may present as a painful breast mass or a breast abscess,^{5,6} or may be misinterpreted clinically and radiologically as a more sinister pathology such as malignancy. Therefore, high clinician index of suspicion is important when dealing with non-iatrogenic traumatic breast injuries in order to exclude or investigate cases of self-inflicted injuries or those due to GBV, especially when patients deny abuse.

Our patient presented with a metal FB of the breast which we suspect was introduced as a result of GBV. GBV may result in other traumatic breast injuries such as haemorrhage, haematomas, fat necrosis and FB granulomas which may present as a mass, causing concern for malignancy.⁷ GBV describes the various forms of violence as a result of the unequal power relationships between genders.^{8,9}

GBV is a common reason for the presentation of many South African women, and women globally, to their local emergency department.⁸ One in three women in the world have experienced physical and/or sexual violence by an intimate partner or non-partner in their lifetime.¹⁰

As in our case, women who are victims of GBV may present with suspicious and fabricated histories in order to protect their abusers and for fear of further violence should their abusers be exposed, thus making it difficult to treat victims of GBV holistically. Therefore, it is important for clinicians to have a high index of suspicion for GBV when dealing with unusual breast injuries even when patients deny any form of abuse.

Conflict of interest

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Ethical approval

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