Mondor’s Disease of the Breast in Immunodeficiency
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Citation

Abstract
We describe a rare case of Mondor’s disease of the breast in a 35-year-old patient diagnosed on clinical suspicion and confirmed on breast ultrasonography. Aetiology of this condition remains speculative. Mondor’s disease is benign and has a self-limiting course being successfully treated with non-steroidal anti-inflammatory agents without the need for tissue biopsy, antibiotics or anticoagulants.

CASE REPORT
A 35-year-old female presented with a 3-month history of right non-cyclical mastalgia. She had no history of trauma or recent breast surgery. The patient was HIV-positive with a CD4 count of 640; she was not on anti-retroviral therapy. Clinical examination revealed a tender, thick cord-like band extending from the nipple-areolar complex towards the axilla, with retraction of the overlying skin (Fig 1). There were neither associated breast masses nor axillary lymphadenopathy.

Ultrasound of the right breast revealed a thick tubular hypoechoic structure without flow on Doppler studies, consistent with Mondor’s disease (Fig 2).

The patient was prescribed analgesics, non-steroidal anti-inflammatory drugs and topical non-steroidal ointments. Considerable resolution of the condition was noted at review 3 weeks later.

Figure 1
Figure 1: Skin furrow (indicated by arrows) overlying a fibrous band extending from the upper inner quadrant to the upper outer quadrant of the right breast
**DISCUSSION**

Mondor’s disease of the breast was first described by Henri Mondor in 1939.\(^1\) The condition refers to a superficial thrombophlebitis of the anterior chest wall veins namely, the superior epigastric vein, thoraco-epigastric vein and lateral thoracic vein. Mondor’s disease has also been described in the penis, groin, abdomen, arm and axilla.

The pathogenesis of Mondor’s disease remains obscure. The condition has been associated with local trauma such as surgical biopsy, breast surgery, mastitis, breast cancer, large and pendulous breasts, local muscle strains, vigorous upper extremity exercise and compressive garments.\(^2\) Protein S deficiency has also been described as an aetiologial factor.\(^3\) This may be relevant for our patient since HIV is associated with Protein S deficiency.

Clinical diagnosis is made with the sudden appearance of a subcutaneous cord initially red and tender that progresses to a painless fibrous cord, described as “ribbon-like” or a “bow-string” that makes a furrow when the arm is raised or the breast is palpated.\(^4\)

Diagnostic evaluation includes breast ultrasonography and mammography in patients older than 35 years. Sonographic features of a superficially located, long, tubular, anechoic structure with a beaded appearance that does not show any flow on color or spectral Doppler studies is considered pathognomonic. Mammography may reveal a dilated tubular density that may be mistaken for a dilated duct.\(^5\)

The condition is not precancerous and has a self-limiting course. Conservative management includes the use of anti-inflammatory agents without a need for antibiotics, anticoagulants or tissue biopsy.\(^6\)

**References**

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