CASE REPORT

Mastitis with Mondor's Disease

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Abstract

Breast complications are not very common during pregnancy and puerperium. Mondor's disease of the breast is a rare benign breast condition.[1] It is an inflammation of the superficial veins in the anterior chest wall and breasts. It is caused by blood clotting in these veins.[2] Mondor's disease is a very rare condition. It usually occurs in individuals who are between 30 and 60 years of age.[3] The incidence of mastitis is 2–5% in lactating women. The common organisms involved are *Staphylococcus aureus*, *Staphylococcus epidermidis* and *Viridans streptococci*. Risk factors for mastitis are poor nursing, maternal fatigue and cracked nipple.[4] Greater veins are affected by thrombophlebitis. It can advance into the deep venous system. It leads to pulmonary embolism.[5]

Keywords: Mastitis, Mondor's disease, Puerperium, Thrombophlebitis.

Pondicherry Journal of Nursing (2019): 10.5005/jp-journals-10084-12111

Introduction

Mondor's disease is an inflammation of the superficial veins in the breast and anterior chest wall due to blood clotting in these veins. It is also called as "Mondor's syndrome of superficial thrombophlebitis."[1,9,11,13]

Case Description

A 28-years old primigravid woman at 37 weeks and 2 days with left breast fibrocystic disease with mastitis was admitted with the complaints of breast swelling, pain over the chest and breast, breast milk discharge and intermittent fever on and off. She was receiving regular antenatal care. She underwent emergency lower segment cesarean section (LSCS) due to fetal distress and delivered an alive term female baby. Baby birth weight was 2.24 kg and Apgar score was 8/10, 9/10. Mother had the complaints of pain over the left breast and the baby was not feeding from the left breast. Patient underwent several investigations and diagnosed with mastitis with Mondor's disease. The patient received antibiotic, mild analgesic and medication for breast milk suppression. The detailed content of the case report was given below.

Examination

Swelling, tenderness, warmth, and distended veins was present on the left breast, chest pain was pricking type intermittent and not radiating and fever was on and off for 2 weeks.

Investigation

Blood Examination

Hemoglobin (Hb): 8.4 g/dL, WBC-TC: 8500 cells/mm^3, DC: N—81%, E—8%, M—2%, erythrocyte sedimentation rate (ESR)—70 mm/hour and 140 mm/hour, RBC—92 mg/dL, platelets—5.2 lakhs, HIV-negative and HBS-negative.

Ultrasound

Left side breast enlarged with 2 × 2.5 cm size. Breast parenchyma appears hyperchoic shows increased vascularity. Multiple dilated ducts with free floating internal echoes and does not show any internal vascularity.

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How to cite this article: Poongodi V, Annal MA, Lavanya S. Mastitis with Mondor's Disease. Pon J Nurs 2019;12(1):15–17.

Source of support: Nil

Conflict of interest: None

FNAC: Left breast USG guided.

Microscopy: Cellular smear showing cluster of ductal epithelial cells showing lactational changes admixed with myoepithelial cells. Some of the clusters exhibit apocrine metaplasia. Numerous foamy macrophages, multinucleated histiocytes and few inflammatory cells are present in a proteinaceous background.

Impression

The clinical diagnosis was made by interdisciplinary team of physician from obstetrics and gynecology, general surgery, radiology and pathology team. Features were suggestive of mastitis with Mondor's disease.

Treatment

- The patient received antibiotic inj. cefuroxime 1 g as BD dose intravenously for five days, mild analgesic—inj. diclofenac 80 mg and inj. ketorolac 30 mg alternatively every 6th hourly, tab. cabergoline 0.5 mg for breast milk suppression. Restricted breastfeeding from both breasts.
- As a part of nursing management breast massage, hot water application, breast milk expression was done to the patient. Psychological support given. Advise to maintain personal hygiene, maintaining hydration status, assist to cope up with hospitalization.

Follow-up

Patient has been following up regularly, prognosis was good. Patient was advised follow up for first 3 months and then at 3–6 months interval.

Discussion

Mondor's disease was first described in detail by Henri Mondor in 1939.[2,10,12,13] This condition is a rare entity characterized by sclerosing thrombophlebitis of subcutaneous veins of the anterior chest wall. It sometimes occurs in the neck, underarms, arms, groin and penis. In axilla, this condition is known as axillary web syndrome.[2,10,12,13,38] It is a rare condition which involves thrombophlebitis of the superficial veins of the breast and anterior chest wall. It may also occurs in the arm or penis.[1,30] In axilla, it is known as axillary web syndrome. Mondor's disease commonly affects adult women (between the ages 30 and 60 years). Females are mostly affected than males. There is no racial or ethnic predilection observed with Mondor's disease.[6,12,14,15]

Mondor's disease is usually benign and self-limiting. Cause is regularly not identified, but it may found during accident, surgery, or inflammation.[16,18,19] This can be occasional cases of associated cancer. Pathology is stagnation of blood due to pressure on the vein or as direct trauma to the vein or with itsel.[17,20,21,33] Repeated stretching and relaxing of the veins lying superficially caused by contracting and relaxing of pectoral muscles.[8,21–23] In anterior chest wall or breast, swelling and redness of a limited area present often have abrupt onset of superficial pain.[3,22,24,25,35]

Due to lump present, linear and tender may be present.[7,32,34,40] Management is with warm compresses and pain relievers, most commonly NSAIDS such as ibuprofen.[5,26,29,31,37] When thrombophlebitis affects the greater veins, it can progress into the deep venous system, and may lead to pulmonary embolism.[6,27,28] Complications are breast abscess, benign breast disease and breast carcinoma.[2,8,36,39,41,42]

Conclusion

This case has been presented for its rarity. Detailed history and investigations are proved the disease progression. Patient cooperated well for all the investigation.

Declaration of Patient Consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understand that their names and initials will not be published and due efforts will be made to conceal theit identity, but anonymity cannot be guaranteed.

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