

Mondor's disease in a patient previously treated for breast carcinoma in situ: a case report

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Abstract

Mondor's disease is a thrombophlebitis that affects mainly the superficial veins of the breast. The aetiology of Mondor's disease is multifaceted and there are reports in the literature of an association between Mondor's disease and breast cancer. This disease occurs more commonly in women than men, mainly in the third and fourth decades of life, leading to a spontaneous remission in most cases. We report a case of a 45-year-old female patient that had been treated for breast carcinoma in situ.

In 1939, the French surgeon Henri Mondor¹ described a rare, self-limited condition of benign nature characterised by thrombophlebitis of superficial veins of the breast, more commonly the thoracoepigastric vein and its branches.² The clinical hallmark is a fibrous cord, occasionally with the aspect of rosary beads, that can be asymptomatic or cause pain.

Its aetiology is multifaceted and there are reports in the literature of an association between Mondor's disease and breast cancer. This disease occurs more commonly in women than men, mainly in the third and fourth decades of life,³ leading to a spontaneous remission in most cases.

We report a case of a patient that had been treated for breast carcinoma *in situ*.

Case report

A 45-year-old female patient with a history of carcinoma *in situ* on the left breast had undergone segmental resection of the left breast with intraoperative frozen-section evaluation of the margins 9 months prior to developing Mondor's disease. The frozen and paraffin sections demonstrated tumor-free surgical margins. The patient received postoperative adjuvant radiation therapy and progressed with mild actinic dermatitis, which then resolved completely. She had been taking tamoxifen 20 mg/day for 8 months without significant side effects, except for hot flushes.

Three days earlier the patient experienced severe pain accompanied by a painful cord-like hardening on the left chest wall and a "pulling" sensation. On the physical examination, her breasts and axillae were normal and a proper healing of the left breast surgical scar was noted. There was no evidence of ongoing oncologic disease. The patient had a fibrous cord and a thickening of approximately 20 cm located on the topography of the left lateral thoracic vein (Figure 1) consistent with thrombophlebitis of the left lateral thoracic vein (Mondor's disease).

Breast mammography and ultrasound had been performed 4 months earlier and were unremarkable.

Non-steroidal anti-inflammatory drugs were prescribed and the condition subsequently resolved. Four months after the diagnosis, the patient remains asymptomatic.

Figure 1. Fibrous cord with about 20cm in the topography of the lateral thoracic left vein



Discussion

Mondor's disease is a thrombophlebitis that affects mainly the superficial veins of the breast. The blood vessels most involved are the lateral thoracic, the thoracoepigastric and the superior epigastric veins.⁴ Rarely, it affects areas such as the penis, groin, abdomen and upper limbs.²

The disease affects more women than men, at a 3:1 ratio.³ About half of the cases have an idiopathic origin. Among other causes are hypercoagulable states, thoracic surgical traumas (mainly after breast biopsy or removal of this gland), wearing of tight clothes, breast infection and inflammation, physical exertion, and breast carcinoma (which account for up to 12% of cases).⁵⁻⁷

This condition is related to the compression of superficial vessels of the breast by tumors or metastases, leading to a blood stasis.⁸ To date, we have not found any report in the literature of the occurrence of a similar case after treatment of breast carcinoma

in situ and no other factor has been identified as associated with Mondor's disease in this case.

The major symptoms are pain, breast enlargement and skin tethering on the site of the thrombosed vessel. On the physical examination, the primary hallmark is a fibrous cord or a palpable mass. There are also asymptomatic cases.⁹ The diagnosis is essentially clinical and the treatment is based on anti-inflammatory and analgesic drugs.¹⁰ The patient of the present case progressed to complete resolution of symptoms, after treatment.

Patients with a previous diagnosis of breast cancer, or any alteration of the breast, leads to stress, as they usually relate these alterations to a recurrence of the disease. Therefore, a comprehensive understanding of the disease is essential in an attempt to reduce the patient's stress and prevent unwarranted procedures.

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Acknowledgement: We thank the patient for her consent and cooperation.

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