Mondor's disease in the breast: A rare benign breast condition

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Abstract :

Background :

Mondor's disease is a rare benign disease. The breast localization is rare and characterized by thrombophlebitis of the superficial veins of the chest wall. This condition is rarely reported, which in part, may be due to the lack of awareness of the entity
Put more light on this rare condition.

CASE REPORT:
A 34 years old Arabic female, presented with an aching right breast. She has no past medical. She was under oral oestroprogestative contraception for 11 years.
On physical examination an indurated, painful cordlike structure was palpated in the upper outer quadrant of the right breast.
The Sonography confirmed the diagnosis.
The patient was prescribed painkillers and Non-steroidal anti-inflammatory drug. The evolution of the disease was marked by a complete recovery within ten days.

CONCLUSION:
Mondor's disease is a rare and usually self-limited benign disease.

Although the incidence of Mondor's disease is rare and its association with breast cancer might be low, awareness of this benign condition is important and of value to breast imagers and care takers

Key words:

Case report, mondor's disease, breast cancer, superficial vein thrombosis

Introduction:

Mondor's disease (MD) is a rare benign disease first described by the French surgeon Henri Mondor in 1939. Originally, it was defined by the association of a superficial vein thrombosis (SVT) without contiguous skin inflammation of the chest wall veins. Over time the definition changed to include subcutaneous thrombosis of the dorsal vein of the penis but also retractile scarring of the fascia after breast surgery without concomitant SVT(1).

The breast localization is rare and characterized by thrombophlebitis of the Superficial veins of the chest wall. This condition is rarely reported, which, in part, may be due to the lack of awareness of the entity (2).

Case Report :

A 34 years old Arabic Female, presented with an aching right breast. She has no past medical history of breast injury or breast disease. She was under oral oestroprogestative contraception for 11 years.

On physical examination a seven centimeter indurated, painful cordlike structure was palpated in the upper outer quadrant of the right breast. The cords radiated from the retroareolar region towards the axillary fossa (fig 1). The tract was adhered to the skin and mild cutaneous retraction without erythema.

On sonography, a tubular anechoic structures with an area of narrowing, giving a beaded appearance to the vessel. No flow was present in the structure on color or spectral Doppler studies.
The patient was prescribed painkillers and
Non-steroidal anti-inflammatory drug. The evolution of the disease was marked by a complete recovery within ten days.

Discussion:

The MD is a rare disease the prevalence of which is difficult to establish(3).

Incidence rates that have been reported for the breast are 0.5 and 0.9%, but these studies included symptomatic patients and, therefore, do not reflect the true incidence of the disease in an asymtomatic population (2,4,5)

MD diagnosis is primarily made by history and physical examination(6).
The MD for the breast is due to the SVT affecting any subcutaneous vein on the upper anterolateral chest wall (7). Clinical findings are therefore usually to be found in the mammary area, radiating from the region of the areola towards the axilla, epigastrium or subcostal margin (8).

The MD diagnosis is mainly clinical. It can be confirmed through ultrasonographic (US) exploration showing direct or indirect signs of thrombus:
-Presence of an internal echogenicity in the superficial vein in Gray scale,
-Absence of venous flow signal on color Doppler
-Incompressible vein on compression by ultrasound probe.

It should be pointed out that all available tools (color flow, e flow, B flow, pulsed Doppler…) are important for the exploration (9).

In some cases both clinical and US exploration are mandatory to set a diagnosis.
For example; in case of palpable fibrous cord and skin retraction without inflammation and without US evidence of thrombus the most likely etiology is a fascia related problem. In case of local inflammation with US evidence of SVT the most likely diagnosis is a SVT of unusual site.(1)

Mammography is not necessary for the diagnosis of MD. However, in the context of suspicion of breast cancer it shows to be highly important.

Laroche and al(1),made a pooled-analysis of the four
largest and most recent series of patients presenting a MD of the chest wall, a third of MD were fully idiopathic (4,10–13).
In the same pooled analysis (1), a similar number of cases was due to trauma. Trauma such as breast injury,muscular strain, heavy load or tight breast support and in 11.9% of the cases it was a iatrogenic Trauma such as surgical biopsies or breast prosthesis.

MD is according to common knowledge a benign disease.
Catania and al (11) reported an incidence of 12,4% (8/64 patients) of associated breast cancer.

In The pooled analysis (1), 6.3% of cases a breast cancer was diagnosed and all the cases were found in Catania and al study (11).
In conclusion no clear relation was established between MD and Breast Cancer But we can recommend the practice of a systematic mammogram to patients with MD.
Other rare reported, etiologies are underlying connective tissue diseases and hypercoagulable states (thrombophilia or women under hormone therapy) (12).

Due to the rarity of the disease and their potential multifactor origin
There is no consensus in the optimal treatment for MD.

For the chest wall MD, the evolution is thought to be spontaneously favorable in 2 to 8 weeks, there is no need for anticoagulant treatment (3,14).
Patients are conservatively treated for pain with inflammatory and analgesic drugs. Antibiotics are not indicated.(2)

The aching pain usually abates within 10 days, but an asymptomatic or tender cord can remain for weeks or months thereafter (15).
In Pugh and al series (3),the complete clinical resolution was achieved within 2–8 weeks of presentation.

In Conard's series (12) of 23 MD of the chest wall, only 13.0% recurred . In Salemis series (10), no recurrence occurred at 3 years and no cancer was diagnosed.
Mayor and al (8) reported a recurrence in approximately 5% of cases and it's generally ipislateral.
In conclusion MD evolution is usually good with no recurrence but that fact have to be kept in mind.

Conclusion:

MD is a rare and usually self-limited benign disease. The first step of diagnostic management is the clinical examination. US test, by showing the presence or the absence of thrombus has become The Major complementary exploration. Although the incidence of Mondor's disease is rare and its association with breast cancer might be low, awareness of this benign condition is important and of value to breast imagers and care takers. Treatment is debated and evolution is usually good with low recurrence rate.

Declaration :

Ethics approval and consent to participate

I declare no conflicts of interest between the author And that this work was made with all the due respect to the code of ethics under the supervision of the medical and ethic comitee of the Tahar Mammouri Hospital .

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal."

Data and supporting materials section :

Google scholar have been used searching for the articles cited in the refrence list

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I declare no compteing interests

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Authors' contribution :

MG, AT : data collection, review of the littérature and drafted the manuscript

MH, IJ,HB : review of the litterature and drafted the manuscript

SS, MM, HT : drafted the manuscript

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Figure title and legend section :

Picture 1: inspection of a breast with MD

Picture 2 :US imaging of the thrombotic vessel