Mondor’s disease in puerperium: case report

Doença de Mondor no puerpério: caso clínico

Abstract

Mondor’s disease is a rare entity characterized by sclerosing thrombophlebitis classically involving one or more of the subcutaneous veins of the breast and anterior chest wall. It is usually a self-limited, benign condition, despite of rare cases of association to cancer. We present the case of a 32 year-old female, breast-feeding, who went to emergency due to left mastalgia for the past week. She was taking antibiotics and non-steroidal anti-inflammatory drugs, previously prescribed for suspicious of mastitis, for three days, with no clinical improvement. Physical examination showed an enlarged left breast, an axillary lump and a painful cord-like structure in the upper outer quadrant of the same breast. Ultrasound scan showed a markedly dilated superficial vein in the upper outer quadrant of left breast. The patient was given a venotrophic therapy and was kept in anti-inflammatory, with progressive pain improvement. Ultrasound control was performed after four weeks, showing reperfusion.

Resumo

A doença de Mondor é entidade rara caracterizada por tromboflebite esclerosante envolvendo classicamente uma ou mais das veias subcutâneas da mama e da parede torácica anterior. Trata-se de condição benigna normalmente auto-limitada, apesar de raros casos de associação ao câncer. Descreve-se o caso de uma mulher lactante de 32 anos de idade, que procurou serviço de emergência devido a mastalgia do lado direito na última semana. A paciente estava tomando antibióticos, mas não medicamentos esteroides anti-inflamatórios, previamente prescritos devido a suspeita de mastite, nos últimos três dias, sem melhora clínica. O exame físico mostrou o seio esquerdo aumentado, um nódulo axilar e uma estrutura dolorosa em formato de corda no quadrante superior externo da mesma mama. A ultrassonografia revelou uma veia superficial acentuadamente dilatada no quadrante superior externo da mama esquerda. A paciente recebeu terapia venotrópica and manteve o tratamento com anti-inflamatórios, com melhora progressiva da dor. Controle ultrassonográfico foi realizado após quatro semanas, mostrando reperfusão.
Introduction

Mondor’s disease is a rare entity characterized by sclerosing thrombophlebitis classically involving one or more of the subcutaneous veins of the breast and anterior chest wall (superior epigastric, thoracoepigastric and/or lateral thoracic vein). Rare cases have been reported in atypical sites (penis, groin, antecubital fossa and abdomen). Henri Mondor first described it in detail in 1939 and this condition is rarely reported, in part, due to the lack of awareness to identify it. This is a benign, self-limited condition.

Diagnosis is usually clinical, by the presence of a cord-like structure, superficial in the thorax, and can be confirmed by imaging exams, such as ultrasound scan with Doppler study.

The majority of reports describe thrombophlebitis on the thoracoabdominal wall as a sequela of breast surgery. The authors report a case of Mondor’s disease during puerperium.

Case presentation

Thirty-two year-old white, puerperal female, delivered vaginally 40 days before and no previous medical problems. She was still breastfeeding and went to Emergency due to left mastalgia for the past week, in the absence of previous trauma. She was taking antibiotics and no steroidal anti-inflammatory drugs, previously prescribed for suspicious of mastitis, for three days, with no clinical improvement. Physical examination showed an enlarged left breast, an axillary lump and a painful cord-like structure in the upper outer quadrant of the same breast (Figure 1). No fever and no inflammatory signs were registered. The clinical suspicious of Mondor’s disease was confirmed by ultrasound scan, showing a markedly dilated superficial vein in the upper outer quadrant of left breast (Figure 2). The patient was given a ventropic therapy (diosmin 500 mg twice a day) and was kept in anti-inflammatory (diclofenac 75 mg per day), for two weeks, with progressive pain improvement. Ultrasound control was performed after four weeks, showing reperfusion. Mammogram performed was normal.

Discussion

Mondor’s disease affects mainly women (10:1), with the peak incidence at the age of 43. Fewer than 400 cases have been reported in the world literature. However, its incidence after breast cancer surgery and aesthetic mammoplasties has been estimated at 1%.

The pathophysiology is not clear, but it has been explained as pressure on the vein affected with stagnation of blood or as direct trauma to the vein itself. In cases that do not show such evidence, the most reasonable explanation is on the basis of repeated movement of the breast along with the contracting and relaxing pectoral muscles, which causes stretching and relaxing of the veins. The majority of patients reported in the literature had no identifiable cause. However, trauma, including surgery, seems to play an important role in some cases, with the disease developing 5–7 weeks after surgery, possibly as a result of the injury to subcutaneous veins. Other reported possible aetiology factors include excessive physical activity, concomitant breast inflammation in the form of mastitis or abscess, pendulous breast, tight-fitting brasserie, rheumatoid arthritis, febrile episodes and filariasis, as well as, associated with pregnancy, oral contraceptives and intravenous drug use.

In the present case, a previous mastitis could have been the origin of the thrombophlebitis or there could have been a misdiagnosis, reason why it was not improving with the antibiotics prescribed.

Clinically, it presents as a palpable subcutaneous cord-like structure. It is associated with sudden onset of breast pain, breast enlargement and skin retraction. The most common site is the upper outer quadrant; bilaterality is rare. There are some asymptomatic cases.

Ultrasound scan can be the first exam in younger patients and it is useful to confirm and monitor the evolution, however clinical suspicious is essential. Ultrasound scan
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shows initially a superficially located, long, tubular an-

echoic structure, with no flow on color Doppler study
to. During evolution, the flow can return and the vein size
decreases until normal caliber. Mammogram should be

to perform to exclude cancer, even if it is rare.

The condition, though benign and self-limited, has

been associated with breast cancer. The incidence of breast
cancer was lower in older series (2.4%) but Catania et al.
reported the highest incidence of breast cancer yet
reported (12.7%), reason why attention should be paid
even in young patients. This relationship with breast
cancer and risk factors suggests that routine mammogram
is advisable and should always be performed, even when
the results of physical examination are negative.

Once cancer is excluded, the expectant manage-
ment is desired, reassuring the patient that it is a benign
condition. Most of the cases have a good prognosis, with
spontaneous complete remission, requiring only symp-
tomatic treatment (anti-inflammatory medication and
local application of heat).

The recent guidelines of the American College
of Chest Physicians on superficial thrombophlebitis
suggested prophylactic or intermediate doses of low
molecular-weight heparin for at least 4 weeks (grade 2B
evidence) without concomitant addition of non-steroidal
anti-inflammatory drugs. There is no clear recommen-
dation on Mondor’s disease itself but considering the
syndrome as a form of thrombophlebitis, which could
have been an option.

A six-month follow-up, with both mammogram and
sonogram, is appropriated. Very rarely, there is the need
of surgical excision of the thrombosed vein.

References

1. Camargo Jr HSA, Camargo MMA, Teixeira SRC. Doença de
Mondor: apresentação de três casos com características clínicas

2. Mondor H. Tronculite sous-cutanée subaigue de la paroi thoracique

3. Niechajev I. Mondor’s subcutaneous banding after transaxillary
breast augmentation: case report and the review of literature.


7. Khan UD. Mondor disease: a case report and review of the


9. Shetty MK, Watson AB. Mondor’s disease of the breast: sonographic and


de Mondor e carcinoma da mama – caso clinico. Acta Obstet

thromboembolic disease: American College of Chest Physicians
2008;133[6 Suppl]:454S-545S.