



# CLINICAL CASE REPORT: MONDOR'S DISEASE

ENFERMEDAD DE MONDOR: A PROPÓSITO DE UN CASO CLÍNICO

Edilberto Temoche-Espinoza<sup>1,2,a,b</sup>, Christian Hu-Noriega<sup>1,3,b</sup>, Horacio Ruiz-Gutiérrez<sup>3,b</sup>

## ABSTRACT

Mondor's disease is a clinical entity characterized by the appearance of a palpable cord-like lesion on the surface of the body. It is generally considered self-limiting benign thrombophlebitis that resolves in four to eight weeks without any specific treatment. It presents in the case of sudden appearance and favorable, spontaneous evolution. A literature review on the subject is carried out.

**Key words:** Thrombophlebitis; Breast; Thoracic wall (source: MeSH NLM).

## RESUMEN

La enfermedad de Mondor es una entidad clínica caracterizada por la aparición de una induración palpable similar a un cordón en la superficie del cuerpo. En general es considerada como una tromboflebitis benigna autolimitada que se resuelve en cuatro u ocho semanas sin ningún tratamiento específico. Se presenta un caso de aparición súbita y evolución favorable, espontánea. Se realiza una revisión de la literatura a propósito del mismo.

**Palabras clave:** Tromboflebitis; Mama; Pared torácica (fuente: DeCS BIREME).

## INTRODUCTION

Henri Mondor, described thrombophlebitis of the chest wall in 1939 under the title "Subacute subcutaneous trunculitis of the anterolateral chest wall" in which, described four cases of subcutaneous vasculitis in the chest wall which he soon identified as Thrombophlebitis. Although the first case was described by Fagge in 1869 as a form of scleroderma and there were earlier references by Fiessinger and Mathieu (1922), Williams (1931), Daniels (1932), Moschowitz (1933), and Robinson (1935); however, it was Mondor who managed, throughout history, to associate his name with thrombophlebitis of the thoracoepigastric vein; although he is more famous in France for being a biographer of Louis Pasteur, Guillaume Dupuytren, and Rene Leriche.

This rare entity is characterized by sclerosing thrombophlebitis of the subcutaneous veins of the anterior thoracic wall. It is identified by a subcutaneous cord, initially erythematous and sensitive to later transform into a painless and resistant fibrous cord that is accompanied by tension and retraction of the skin. This generally benign condition is self-limiting. It is sometimes associated with other systemic disorders, especially breast cancer<sup>(1,2)</sup>. Subcutaneous thrombosis of the penis vein (Mondor's disease of the penis) has been described<sup>(3,4)</sup> and even in the groin, abdomen, arm, and armpit, where it is called axillary network syndrome and may be evident after dissection of the axillary lymph nodes and biopsy of the sentinel lymph nodes<sup>(5)</sup>.

<sup>1</sup> Complejo Hospitalario PNP. "Luis N. Sáenz", Lima-Perú<sup>(1)</sup>.

<sup>2</sup> Universidad Nacional Federico Villarreal, Facultad de Medicina "Hipólito Unánue", Lima-Perú.

<sup>3</sup> Universidad Ricardo Palma, Facultad de Medicina Humana, Lima-Perú.

<sup>a</sup> Master in Public Health.

<sup>b</sup> General Surgeon.

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## CASE REPORT

A 45-year-old male patient went through medical consultation and reported a sudden appearance of a cord in the anterior region of the thorax and epigastrium, after sudden physical exertion, and with stretching pain. The patient denied any history of pathology. The examination showed dilation and thickening of the superior epigastric vein, not painful on palpation, and without evidence of nodules or tumors in the anterior thoracic region or metastatic axillary nodes, or in the groin, posterior cervical region, antecubital fossa and penis. Auxiliary tests such as blood count and coagulation profile were found within normal limits. Doppler ultrasound of the affected vessel was negative for thrombosis. The symptoms persisted for three weeks and then disappeared spontaneously. Only received nonsteroidal anti-inflammatory drugs, ibuprofen 400mg C / 12 hours orally for the first five days.

For the present case, informed consent was obtained from the patient and permission from the PNP Central Hospital " Luis N. Saenz for its execution and publication.

## DISCUSSION

Mondor's disease is rare, unilateral, and self-limiting in almost all cases. Although its etiology is uncertain, it is associated with intense physical activity, trauma, inflammatory or infectious processes, neoplastic processes such as breast cancer or metastatic processes<sup>(5)</sup>. It is three times more common in women than men between the ages of 30 and 60 and has also been linked to breast cancer surgery and mammoplasties<sup>(6)</sup>. It can also occur as a result of the excision of the axillary nodes after rupture of silicone gel breast implant or as a complication of ultrasound-guided core needle breast biopsy. Also, the trauma of breast augmentation is considered a predisposing factor<sup>(7)</sup>.

Its appearance has been related to a pressure in the vein that conditions the stagnation of blood or a direct trauma on it. In others, it is explained by the repeated movement of the breast along with the contraction and relaxation of the pectoral muscles<sup>(8)</sup>, which causes stretching and relaxation of the veins<sup>(9)</sup>. It can be developed from wearing a tight bra to intense training of the thoracoabdominal area<sup>(10)</sup>.

It is described only when it involves one or more of the three venous channels: the thoracoepigastric vein, the lateral thoracic vein, and the upper epigastric vein. The upper and inner parts of the breast are never involved and sometimes involve the penis, groin, antecubital fossa, and posterior cervical region<sup>(11)</sup>.

Immunohistochemical markers have recently been used, the same that revealed that most of these cords corresponded to thrombophlebitis of a superficial vein, while in the others to lymphangitis. "The combination of polyclonal antibodies against the Lymphatic vessel endothelial hyaluronan receptor 1 (LYVE1), a marker for the lymph vessel, and the Von Willebrand Factor Antibody, a conventional blood vessel marker, can clearly distinguish between these two"<sup>(12)</sup>. While biopsies are true to confirm the cure of the disease, they are also useful in detecting underlying conditions or ruling out differential diagnoses. However, considering the characteristics of this disease to be benign and self-limiting " " a biopsy does not seem beneficial to most patients in light of its invasive nature.

Therefore, a biopsy should be considered only when the lesion is highly suspected of malignancy or vasculitis, or only when the lesion does not resolve within an expected resolution period of four to eight weeks"<sup>(13)</sup>.

The differential diagnosis should be made mainly with the rupture of muscle fibers, larva migrans infection and Ackerman's disease (interstitial granuloma associated with collagenopathies) that runs with arthritis and skin lesions in the form of infiltrated plaques and erythematous cords, which constitute the so-called "chord sign"<sup>(14)</sup>.

Adequate clinical evaluation is important to rule out any associated primary or secondary oncological pathology, as well as migratory thrombophlebitis. The diagnosis is fundamentally clinical, the palpable and painful tumor of sudden onset that simulates a beaded cord usually disappears in two to ten weeks. Ultrasound may show Altered vascular permeability by thrombus. Treatment is symptomatic with nonsteroidal anti-inflammatory drugs<sup>(15)</sup> and the prognosis is good. With this case report, we intend to contribute to the knowledge of the rare disease of Mondor.

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**Correspondence:** Edilberto Temoche Espinoza.

**Address:** Complejo Hospitalario PNP. "Luis N. Sáenz" / Dpto. Cirugía General Avenida Brasil cuadra 26, Jesús María 15072, Lima-Perú.

**Telephone number:** 999388726

**E-mail:** etemoche@gmail.com

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