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Mondor Disease: A New Case Report and Review of the Literature

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Abstract **Case Report**

Mondor's disease is a rare thrombotic condition that impacts the venous system of the abdominal wall. It predominantly occurs in females and is characterized by a benign and self-regressive prognosis. The diagnosis is primarily clinical, and the exact cause remains unidentified. This case report explores the instance of a young man who developed bilateral subacute thrombosis after undergoing surgical treatment for bilateral varicocele. The symptoms showed improvement with anti-inflammatory treatment.

Keywords: Mondor's disease; Superficial thrombophlebitis; treatment.

INTRODUCTION

Mondor's disease is an uncommon superficial venous thrombotic condition affecting the chest wall, typically benign with a low risk of embolism. It frequently occurs in women, particularly following breast surgery. French surgeon Henri Mondor first described it in 1939, labeling it as "subacute subcutaneous tronculitis of the anterolateral chest wall." Its occurrence in men is infrequent, with a ratio of 1 man to 10 women [1].

We present a case of Mondor's disease in a 23-year-old patient, manifesting bilaterally following surgical treatment for bilateral varicocele.

OBSERVATION

Mr. M.A, a 23-year-old chronic smoker, has been under observation for recurrent urethritis. He underwent surgery to address a symptomatic bilateral varicocele.

One month following the surgical procedure, our patient was admitted to the department due to bilateral subacute trunculitis that developed postoperatively. Clinical examination disclosed a tortuous and minimally painful bilateral subcutaneous cord extending from the inguinal fold to the axillary region, with an absence of local inflammatory signs (Figure 1). The remainder of the examination revealed no significant findings.

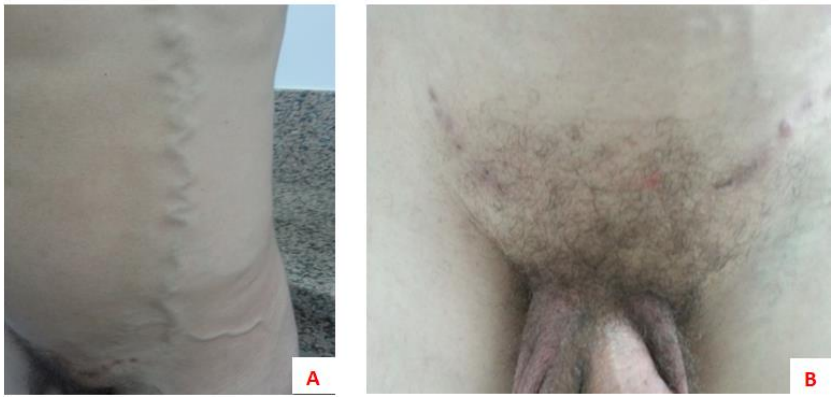

Fig 1: (A) The tortuous subcutaneous veinous cord in the path of the left thoracoépigastric vein; (B) Scars from the inguinal approach to bilateral varicocele

A Doppler ultrasound examination of both lower limbs excluded the presence of deep vein thrombosis and instead indicated bilateral thrombosis of the thoracoepigastric vein.

The patient received symptomatic treatment with non-steroidal anti-inflammatory drugs and paracetamol, leading to the resolution of symptoms. No recurrence was observed during the one-year follow-up.

DISCUSSION

In our case, the occurrence of Mondor's disease was atypical, given that it manifested in a male subject, exhibited bilaterality, and followed the surgical treatment of a bilateral varicocele. The literature reports bilaterality in only 3% of cases [2]. Prevalence and incidence are unknown [3].

Mondor's disease demonstrates a tropism for the thoracoepigastric vein, primarily affecting women in the 30 to 60 age range, with a sex ratio of one man for every ten women [4, 5].

Initially characterized as a condition with the appearance of subacute subcutaneous trunculitis, Mondor's disease was primarily described as inflammatory. However, in the majority of cases, the thrombotic element takes precedence, making it more accurately categorized as phlebothrombosis rather than thrombophlebitis [3]. The caliber and length of the affected vessels vary [6, 7]. A classification has been proposed, delineating three types of Mondor's disease: the first type involves the veins of the chest wall, the second affects the dorsal vein of the penis, and the third is associated with post-mammary surgery [8].

Several differential diagnoses need consideration, including conditions such as lymphangitis, Behçet's disease, and nodular hypodermatitis [3].

Echodoppler is presently considered the gold standard for diagnosing venous thrombosis. However, in the case of Mondor's disease, clinical examination alone is typically sufficient [3].

The etiology of Mondor's disease remains unclear, but certain predisposing factors have been identified. A significant number of reported cases are associated with trauma, including surgery, muscle stretching [9, 10], electrocution, and compression of veins by undergarments [11]. Other authors have also cited various risk factors such as bacterial and viral infections, anatomical variations in venous arches, and the use of vasoconstrictive drugs [11].

In elderly patients without apparent risk factors, it is essential to investigate for potential underlying malignant pathology or hypercoagulable states [12]. In our case, the evident etiology was attributed to the surgical treatment of the varicocele, considering the bilateral nature of the procedure and the nature of the disease.

Symptoms typically persist for an average duration of one to ten weeks, followed by spontaneous regression without complications [5, 13-15]. Although the venous cord may persist for several months in some cases, this is not observed in the current scenario [13, 16]. Recurrence is infrequent, estimated at 5% [17]. Extension into the deep venous network and pulmonary embolism are rare occurrences [18]. Mammography for breast cancer is not conducted systematically [3].

A less common variant of Mondor's disease, with only 40 cases documented in the literature, involves thrombosis of the superficial dorsal vein of the penis. The clinical features and etiologies differ from the more typical presentations, and in some instances, the urological management may necessitate a more radical approach.

The clinical presentation involves a painful induration along the dorsal vein of the penis, accompanied by edema of the prepuce [19]. This manifestation aligns more with thrombophlebitis rather than the phlebothrombosis classically described in chest wall vein involvement [3].

Sexual hyperactivity has been identified as the primary factor in this particular localization, attributed to the genital trauma it induces, likely leading to endothelial necrosis [3].

A venous Doppler ultrasound is crucial for deciding on the need for surgery when venous flow has not resumed within ten weeks or when the thrombus has spread despite medical treatment [20].

The differential diagnosis is established with Peyronie's disease. Typically, the spontaneous evolution or treatment with anti-inflammatory measures is generally favorable.

Therapeutically, there is currently no clear consensus on the management of Mondor's disease [8]. The majority of cases have been successfully treated with non-steroidal anti-inflammatory drugs and paracetamol [21, 22]. Studies have not demonstrated the added benefit of antiplatelet aggregants or heparin therapy, although local infiltration of an anesthetic may be considered to alleviate severe pain [23, 24]. Logically, thrombectomy or stripping is considered when symptoms persist despite medical treatment [25]. In our case, the patient responded well to a two-week course of medical treatment with diclofenac and paracetamol.

CONCLUSION

Mondor's disease is a rare pathology with even rarer clinical manifestations, occurring exceptionally in men and exhibiting a tropism for the superficial venous network. Diagnosis primarily relies on clinical assessment, often confirmed by echodoppler. The etiopathogenesis of the condition remains unclear, and there is no consensus on treatment, though it typically shows favorable outcomes with symptomatic management.

REFERENCES

1. Mejri, M., Azzabi, S., Heriz, A. (2015). Une présentation inhabituelle de la maladie de Mondor. 71 e Congrès de la Société nationale française de médecine interne, Besançon, 10–12 juin 2015 / La Revue de médecine interne, 36S, A76–A185.
2. Hermann, J. B. (1966). Thrombophlebitis of breast and contiguous thoracoabdominal wall (Mondor's disease). *N Y State J Med*, 15, 3146-3152.
3. Quéhé, P., Saliou, A. H., Guias, B., & Bressollette, L. (2009). Maladie de Mondor. À propos de trois cas et revue de la littérature. *Journal des maladies vasculaires*, *34*(1), 54-60.
4. Farrow, J. H. (1955). Thrombophlebitis of the superficial veins of the breast and anterior chest wall (Mondor's disease). *Surg Gynecol Obstet*, 101, 63-68.
5. Pugh, C. M., & DeWitty, R. L. (1996). Mondor's disease. *Journal of the National Medical Association*, *88*(6), 359-363.
6. Mondor, H. (1939). Tronculite sous-cutanée subaiguë de la paroi thoracique antérolatérale. *Mém. Acad. Chir.*, *65*, 1271-1278.
7. Fagge, C. H. (1869). Remarks on certain cutaneous affections. *Guy's Hosp Rep*, *15*, 295-364.
8. Cervellin, G., Creta, M., Riva, M., Di Comite, V., Buttarelli, L., & Lippi, G. (2013). Abdominal Mondor's disease presenting as acute abdominal pain. A case report and literature review. *Acta Biomed.*, *84*(September (2)), 155-158.
9. Onder, M., Canpolat, B., Aksakal, B., & Ali Gurer, M. (2005). Case of Mondor's disease of the abdomen (body-building induced). *International Journal of dermatology*, *44*(4), 345-346.
10. Efem, S. E. E. (1987). Mondor's disease in the groin. *Journal of British Surgery*, *74*(6), 468-468.
11. Álvarez-Garrido, H., Garrido-Ríos, A. A., Sanz-Muñoz, C., & Miranda-Romero, A. (2009). Mondor's disease. *Clinical and experimental dermatology*, *34*(7), 753-756.
12. Tuveri, M., Spada, R., Borsezio, V., & Gabbas, A. (2006). Atypical Mondor's disease mimicking a strangulated Spigelian hernia in a patient with a deep venous obstruction. A case report. *Chirurgia Italiana*, *58*(5), 649-653.
13. Hacker, S. M. (1994). Axillary string phlebitis in pregnancy: a variant of Mondor's disease. *Journal of the American Academy of Dermatology*, *30*(4), 636-638.
14. Taves, D. H., McCurdy, L. I., & Becker, L. (2001). Superficial thrombophlebitis of the breast (Mondor's disease). *Canadian Association of Radiologists Journal*, *52*(3), 193-195.
15. Kikano, G. E., Caceres, V. M., & Sebas, J. A. (1991). Superficial thrombophlebitis of the anterior chest wall (Mondor's disease). *Journal of family practice*, *33*(6), 643-645.
16. Burns, P. E. (1982). Mondor's disease. *Can Med Assoc J*, *127*, 16-17.
17. Mayor, M., Buron, I., De Mora, J. C., Lazaro, T. E., Hernández-Cano, N., Rubio, F. A., & Casado, M. (2000). Mondor's disease. *International journal of dermatology*, *39*(12), 922-925.
18. Cooper, R. A. (1990). Mondor's disease secondary to intravenous drug abuse. *Archives of Surgery*, *125*(6), 807-808.
19. Thomaz, J. B. (1991). Mondor's disease. *Angiologia*, *43*(1), 11-15.
20. Sasso, F., Gulino, G., Basar, M., Carbone, A. D., Torricelli, P., & Alcini, E. (1996). Penile Mondors' disease: an underestimated pathology. *British journal of urology*, *77*(5), 729-732.
21. Fietta, P., & Manganelli, P. (2002). Mondor's diseases. Spectrum of the clinical and pathological features. *Minerva medica*, *93*(6), 453-456.
22. Bircher, J., Schirger, A., OT, C., & Harrison Jr, E. G. (1962, November). Mondor's disease: a vascular rarity. In *Proceedings of the Staff meetings. Mayo Clinic*, 37, 651-656.
23. Álvarez-Garrido, H., Garrido-Ríos, A. A., Sanz-Muñoz, C., & Miranda-Romero, A. (2009). Mondor's disease. *Clinical and experimental dermatology*, *34*(7), 753-756.
24. Mayor, M., & Calvo-Mora, J. (2000). Mondor's disease, *Int J Dermatol*, 39, 922–925.
25. Alvarado, A. (1986). A practical score for the early diagnosis of acute appendicitis. *Annals of emergency medicine*, *15*(5), 557-564.