

## Bywaters' Syndrome

## Lesiones de Bywaters

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A 58-year-old female patient with rheumatoid arthritis who consulted for asymptomatic lesions located in the palmar region of both hands. After the clinical examination and the histopathological study, the diagnosis of Bywaters lesions was reached. (Image 1 and 2)



**Figure 1.** Erythematous macules in the palmar region of the third phalanx.



**Figure 2.** Dermoscopic view

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Erythematous macules that involve the distal portion of the pulps of patients with rheumatoid arthritis (RA) are known as Bywaters lesions, it was described in 1957 by the English rheumatologist Eric Laphorne Bywaters. (1, 2)

The possible triggering mechanism is the thrombosis generated after the concentric thickening of the intima, which in turn obliterates the lumen of the vessel until causing its partial destruction with the subsequent obliterating endarteritis that gives rise to clinical lesions. Approximately 81% of patients with RA show cutaneous manifestations, which include ulcers in the lower limbs, purpura, digital infarcts, gangrene among others; In addition to RA, Bywaters injuries can be part of juvenile RA, Felty's syndrome and other connective tissue diseases. (3, 4)

Clinically, Bywaters' lesions consist of small, single or multiple, erythematous or purpuric macules or papules ranging from 0.5 to 1 mm in diameter that sit on the palms, pads, proximal fold, or nail bed. Their appearance is insidious, they are asymptomatic and disappear in a few days without leaving a scar. They can be complicated by skin microinfarctions that cause painful ulcers as well as

extensive gangrene on the extremities. (2, 4)

At the histological level there are no pathognomonic findings, in the superficial dermis there are micro infarcts with leukocytoclastic vasculitis of small vessels, the clinical differential diagnosis should be made with rheumatoid nodules, capillary hemangioma, Janeway lesions, Kaposi's sarcoma, sarcoidosis, facial granuloma, palm lupus among others. (1, 2)

The Bywaters' lesions are not correlated with systemic vasculitis, exacerbations, or other systemic manifestations of the disease, are not a predictor of poor prognosis, and are not usually related to joint status. Long-term use of corticosteroids has not been shown to be associated with Bywaters' lesions. Due to its evanescent nature and its good clinical prognosis, it does not require specific treatment. (2, 3)

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**Contribution of the authors**

Single authorship.

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**Interest conflict**

We declare that we have no conflict of interest.

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