

CASE FOR DIAGNOSIS

Cold, Erythematous-Violaceous Macules on Both Breasts of a 66-year-old Woman

Máculas eritemato-violáceas frías en ambas mamas de una paciente de 66 años

Medical History

The patient was a 66-year-old woman with no past history of interest. She was referred to our outpatient clinic for asymptomatic, erythematous-violaceous macular lesions on both breasts that had been present for 1 year. The patient denied any history of local inflammation, trauma, or the application of topical products prior to the appearance of the lesions.

Physical Examination

Physical examination revealed the presence on both breasts of erythematous-violaceous macular lesions that did not alter on pressure (Figures 1 and 2). On palpation, there was a persistent decrease in skin temperature in the affected area compared with the surrounding skin, with no signs of arterial ischemia in the region.

Additional Tests

Analysis of surface skin temperature with an MX Onda contact thermometer (MX Onda, Madrid, Spain) showed a decrease of 2 °C in the affected area compared with adjacent healthy skin.

Laboratory tests including complete blood count, biochemistry, erythrocyte sedimentation rate, autoimmune studies, cryoglobulins, lupic anticoagulant, and serology for *Borrelia burgdorferi* were normal or negative. Patch tests were performed with a standard series, showing mild positivity for nickel, which was not relevant to the patient's current problem.

The patient refused skin biopsy.



Figure 1



Figure 2

What Is Your Diagnosis?

Diagnosis

Nevus oligemicus.

Clinical Course and Treatment

No treatment was required. After 2 years of follow-up, the lesions were stable and no new lesions had appeared.

Discussion

Hamartoma or nevus oligemicus was first described in 1981 by Davies et al.¹ It is a rare disorder, with only 10 cases published to date.

While the etiology of nevus oligemicus is not fully understood, some authors suggest that the disorder may be due to a dysregulation of hormone receptors, giving rise to selective vasoconstriction of the deep dermal vascular plexus and a relative vasodilatation of the superficial plexus.^{1,2} The vasoconstriction could explain the characteristically lower temperature detected in this condition, while vasodilatation of the superficial plexus would be responsible for the erythematous appearance of the lesions.

The most characteristic clinical manifestation is a decreased local temperature with respect to the surrounding skin, associated with the presence of erythematous-violaceous macular lesions with irregular borders localized on the abdomen, thighs, hands, and breasts, as observed in our patient.¹⁻⁵ To date, the only triggering factor described has been a cold bath.³ Mallo-García et al⁵ reported 6 cases in which a sedentary life-style and obesity were found in all the patients, although no causal relationship could be established.

The diagnosis is based on clinical features, with demonstration of a decrease of at least 2 °C in skin

temperature. Histology reveals discrete vasodilatation of the superficial dermal plexus and obstruction of the deep blood vessels. However, biopsy is not essential for diagnosis.⁵

The differential diagnosis should include capillary hemangioma and inflammatory erythema. Both of these conditions can be excluded by the pathology findings and also, in inflammatory erythema, the erythema is not fixed and is associated with a local increase in temperature.

Nevus oligemicus is a benign disorder. To date only 10 cases have been published. We report the case of a 66-year-old patient with nevus oligemicus and we believe that this condition should be considered in erythematous-violaceous lesions associated with a decrease in skin temperature.

References

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