

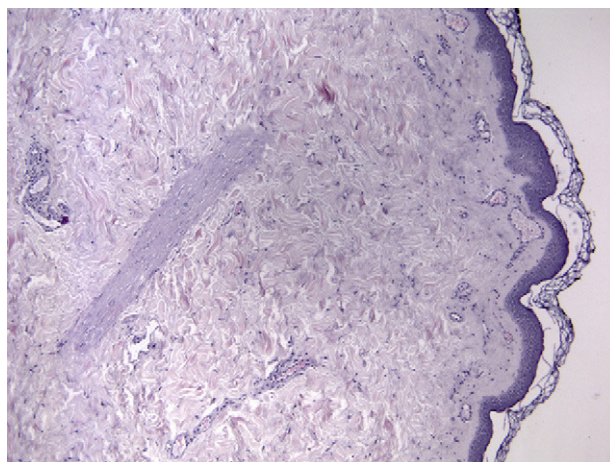
## ***Nevus Oligemicus* on the Breasts: A Report of 2 Cases**<sup>☆</sup>

### ***Nevus oligemicus* localizado en mamas: a propósito de 2 casos**

To the Editor

*Nevus oligemicus* is a recently described dermatologic entity, first mentioned by Davies et al.<sup>1</sup> in 1981; few cases have been reported to date.

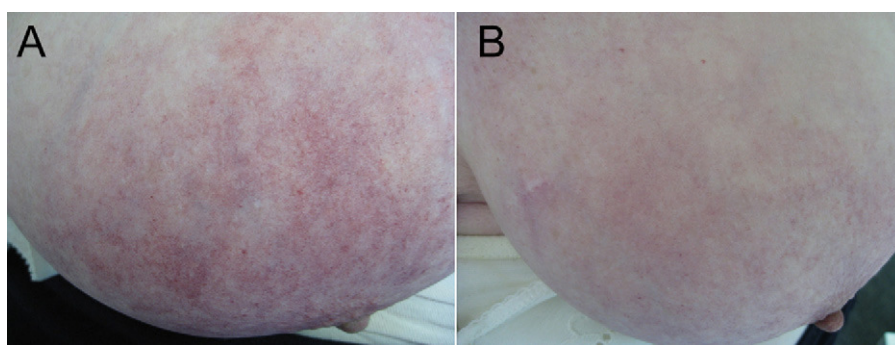
We report 2 cases of women aged 66 and 81 years, identified as patient 1 and patient 2, respectively; the women were evaluated in our department in an interval of approximately 1 year due to the appearance of macules on both breasts. Physical examination revealed erythematous-violaceous telangiectatic macules on the breasts; the macules measured several centimeters and had irregular, poorly defined edges. Palpation caused the macules to turn white and revealed a local temperature that was markedly lower than that of the adjacent healthy tissue, with no signs of arterial ischemia (Fig. 1). The lesions had appeared a year earlier and were asymptomatic. The patients stated that they had not experienced previous local trauma or an infection, or applied topical products. Patient 2 was hypertensive and had osteoporosis and early-stage Alzheimer disease, for which she had been receiving drug therapy for many years. The analyses carried out included a full blood count, biochemistry, coagulation assay, kidney and liver function tests, anticardiolipin antibody assay, antinuclear antibody and cryoglobulin assay, and serology for *Borrelia burgdorferi*, and all results were normal or negative. A skin biopsy was performed only in patient 2 and showed vascular ectasia in the papillary dermis (Fig. 2). The lesions were diagnosed as *nevus oligemicus* and remained stable during a follow-up period of approximately 2 years; no new lesions appeared in this time. *Nevus oligemicus* is rarely reported in the literature; this may be because it is asymptomatic and sometimes not easily noticed, and is therefore underreported by patients or underdiagnosed. The etiology and pathogenesis are unknown, but an abnormality of the



**Figure 2** Hematoxylin-eosin, original magnification x100. Vascular ectasia in the papillary dermis.

adrenergic receptors with increased sympathetic tone in the deep dermal vascular plexus has been suggested. This would lead to reduced deep vascular flow, which is responsible for regulating skin temperature, thereby causing the lesion to be cold to the touch, and relative vasodilation of the superficial vascular plexus, which feeds the tissue, thereby causing the erythema. The term *nevus oligemicus* may be translated as poorly vascularized nevus, and some authors consider it to be a functional rather than an anatomical disorder.<sup>1-3</sup>

The disease manifests clinically as fixed, acquired erythematous-violaceous macules and sometimes in the form of whitish telangiectatic macules,<sup>4</sup> with poorly defined, irregular edges. Palpation of the lesions causes them to turn white and, when measured using a thermometer, their temperature is at least 2°C lower than that of adjacent healthy skin. The lesions are usually located on the abdomen and thighs,<sup>1,4-6</sup> and less frequently on the breasts<sup>7,8</sup> and hands.<sup>2</sup> They are asymptomatic and only 1 case of abnormal local heat sensitivity has been reported.<sup>2</sup>



**Figure 1** Patient 2. Erythematous-violaceous telangiectatic macules, more evident on the right breast.

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Although diagnosis is essentially clinical, histology, if performed, shows dilation of the vessels in the papillary dermis and occlusion of the vessels in the reticular dermis, with a normal number of vessels. Results of vasomotor tests are normal in both the uninvolved and involved skin<sup>1-3,5</sup> and the finding supports the hypothesis that this is a functional anomaly. The only recognized trigger is prolonged bathing in cold water, which has led to the appearance of nevus oligemicus on the hands.<sup>2</sup> Contributing factors such as obesity, a sedentary lifestyle, and proximal pressure (such as that caused by a tight belt) have been suggested for lesions located on the abdomen, but weight loss and removing the pressure failed to resolve the lesions.<sup>5</sup> Our patients were overweight, predominantly around the abdomen, and had large, sagging breasts.

The differential diagnosis should include inflammatory erythema (mastitis, cellulitis, erysipelas), which involves warm lesions that tend to resolve, capillary malformations with no changes in local temperature and with characteristic histologic signs, and livedo reticularis, which is characterized by an erythematous-violaceous reticular pattern.<sup>5,6,8</sup>

In our patients, the lesions remained stable over time, with no changes in size or appearance, and no new lesions developed. Treatment with systemic corticosteroids was ineffective.<sup>5</sup>

In conclusion, we report 2 cases of nevus oligemicus on the breasts, which is a rare site; the only previously reported case on this site involved a single breast.<sup>7</sup> The key to diagnosis is the finding of permanent local hypothermia; it is therefore important to palpate the lesion to detect a reduction of between 2 and 2.5°C in local temperature. We consider that the frequency of this entity is probably greater than indicated by a review of the literature, but that it may go unnoticed or unreported by patients.

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## Infantile Hemangioma of the Eyelid Treated with Timolol Gel<sup>☆</sup>

### Hemangioma infantil palpebral tratado con timolol gel

*To the Editor:*

Hemangioma is the most common benign tumor in childhood, with a prevalence of 10% to 12% in the first year of life.<sup>1</sup> This vascular tumor appears in the early months of life and has 2 phases: a proliferative phase of rapid growth in the first few months, followed by a slow, involuting phase that can last years.<sup>2</sup> Tumors in certain sites require early treatment to prevent sequelae; for instance, periocular tumors have been associated with complications such as amblyopia,

asymmetric astigmatism, proptosis, strabismus, and exposure keratitis.<sup>3-5</sup>

The classic treatment of hemangiomas has essentially been systemic corticosteroids.<sup>6</sup> Other treatments used are topical and intralesional corticosteroids, laser therapy, surgery, and interferon- $\alpha$ <sup>1</sup>. In 2008 Léaute-Labréze<sup>7</sup> described the treatment of hemangiomas with propanolol, which is currently one of the most effective alternatives. In recent years timolol has been successfully used for certain hemangiomas.<sup>3,8-10</sup>

We describe the case of a 2-month-old preterm infant who, at 2 weeks of life, developed a focal hemangioma of infancy on the upper left eyelid; the hemangioma blocked the child's vision and exerted moderate pressure on the eyeball (Fig. 1). The patient was assessed by the ophthalmology department and other eye conditions were ruled out. Because treatment was needed to prevent complications but the parents declined systemic treatment, timolol 0.1% ophthalmic gel was applied twice daily. The gel was instilled into the palpebral conjunctiva by everting the eyelid slightly

<sup>☆</sup> Fernández-Ballesteros MD, et al. Hemangioma infantil palpebral tratado con timolol gel. *Actas Dermosifiliogr.* 2012;103:444-6.