Hyperkeratosis of the Nipple and Areola

Report of 3 Cases

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Background: To date, approximately 43 cases of hyperkeratosis of the nipple and areola have been reported, most of which have been sporadic.

Observation: We describe 3 patients with this dermatosis who were encountered in the outpatient clinic of the Department of Dermatology at the American University of Beirut Medical Center, Beirut, Lebanon, within a 1-year period.

Conclusion: Hyperkeratosis of the nipple and/or areola may be more common than what has been reported in the literature. We propose a revised classification for the condition.

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APPROXIMATELY 43 cases of hyperkeratosis of the nipple and areola have been reported in the literature.1 Most cases have been sporadic. Recently, within a 1-year period between June 1999 and May 2000, 3 patients with this dermatosis were encountered in the outpatient clinic of the Department of Dermatology at the American University of Beirut Medical Center, Beirut, Lebanon. This observation may indicate that hyperkeratosis of the nipple and/or areola may be more common than previously thought.

REPORT OF CASES

CASE 1

A healthy 32-year-old woman presented with asymptomatic progressive thickening of the areola of the left breast occurring over a period of 9 years. On physical examination, a verrucous keratotic plaque was found involving the areola of the left breast (Figure 1A). The left nipple as well as the areola and nipple of the right breast were normal. There was no evidence of warts, ichthyosis, or acanthosis nigricans. No family history of similar lesions was reported. Findings from histopathological examination showed profound compact hyperkeratosis and plugging with a slight to moderate degree of retiform hyperplasia of the epidermis (Figure 1B).

CASE 2

A healthy 20-year-old woman presented with asymptomatic, progressive changes involving both nipples and areolae occurring over an 8-year period. On physical examination, thick hyperkeratotic, verrucous and darkly pigmented plaques were found involving both areolae and nipples (Figure 2). The patient was otherwise healthy and had no other skin lesions. On histopathological examination, hyperkeratosis, papillomatosis, retiform hyperplasia, and a relative increase in pigmentation of the basal cell layer of the epidermis were revealed.

CASE 3

A healthy 22-year-old woman complained of asymptomatic verrucous nipples of a 4-year duration. On physical examination, both nipples appeared hyperpigmented and keratotic. The areolae were normal. Warts, ichthyosis, or acanthosis nigricans were not present. A review of her family history for similar lesions was normal. Findings from histopathological examination showed areas of compact and basket-woven hyperkeratosis, focal parakeratosis, and mild papillomatosis of the epidermis.

COMMENT

The fact that 3 cases of hyperkeratosis of the nipple and areola have been encoun-
treated within a 1-year period indicates that this condition is not as rare as has been reported. Alternatively, it may represent a selection bias related to the tertiary level of care rendered at the American University of Beirut Medical Center, to which unusual cases are referred.

Several case reports in the literature refer to the classification of hyperkeratosis of the nipple and areola suggested by Levy-Franckel in 1938, who described the following 3 types: type 1, hyperkeratosis of the nipple and areola representing an extension of a verrucous (epidermal) nevus (this type is usually unilateral); type 2, hyperkeratosis of the nipple and areola associated with other dermatoses such as ichthyosis, acanthosis nigricans, Darier disease, and lymphoma (this type may be bilateral); and type 3, also known as idiopathic or nevoid hyperkeratosis of the nipple and areola, an unusual variant that appears predominantly in women in the second or third decade of life, for which no obvious cause can be detected. Our 3 cases presumably belong to the last classification.

Response to topical treatments for hyperkeratosis of the nipple and areola, such as keratolytic therapy, cryotherapy, and retinoid therapy, is variable. Recently, carbon dioxide laser treatment has been reported to be effective.

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