

A Puzzling Crusted Scabies on the Nipple of an Immunocompetent Woman

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Abstract

A lot of physicians are unenlightened with the wide spectrum of clinical manifestations that can evolve in the nipple and areola skin. Due to the importance of this area of the body, cosmetically, sexually, and functionally a deep understanding of its disorders is crucial. This case has been reported under crusting and watery sticky drainage from the right nipple secondary to crusted scabies in a healthy patient.

Keywords: Crusted scabies; Breast, Immunocompetence.

Introduction

The breast constitutes an area of considerable medical and cosmetic concern to patients. Moreover, the menace of malignancy in this localization is a protracted source of disquietude. Nevertheless, often physicians and patients avoid examination of the breast because of shyness or discomfort.

The physician who is aware of the disease spectrum in this specific region can ensure a valuable role in pinpointing early diagnosis of worrisome lesions, avoiding inaccurate or overzealous treatment, and allaying anxiety [1]. Crusted scabies previously called

Norwegian scabies is a clinical variant of common scabies, it generally arises in immunocompromised or institutionalized or those with cognitive disabilities [2,3]. It is rare and highly contagious. It's due to severe mite infestation of the skin by the *Sarcoptes scabiei* var. *hominis*. The originality of this case is the localization of the lesion as unilateral in an immunocompetent, healthy patient that may mislead the diagnosis.

Case Report

A 19-year woman has presented two months ago an itchy, painful, irritated unilateral lesion on the right nipple and areola. No records of breastfeeding, piercing, eczema,

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atopic dermatitis, textile contact dermatitis, irritation from laundry cleansers, soaps, or ointment. She wasn't under immunosuppressive drugs and didn't report a history of immune deficiency diseases. No prior history of similar problems has been reported and the absence of poor sanitation

and risky sexual behaviours. On dermatology examination, we observed erythematous eroded plaque covered by honey-coloured crusts on the right nipple (figure 1), no evidence of visible discharge, breast examination was normal (Figure 1).



Figure 1: Eczematous plaque on the right nipple.

No erythematous scaling plaques, lichenification, xerosis, excoriations or other lesions were found on the body, the scalp, and nails. No abnormalities have been reported on the breast Ultrasound and all laboratory data were normal. Medical history revealed a scabies infection that was poorly treated four months ago, she reported

trouble sleeping due to scratching at night. Thus, the diagnosis of crusted scabies was established. We prescribed antibiotic ointment, subsequently topical scabies therapy; benzyl benzoate lotion with favourable evolution, the resolution of the pruritus, and the absence of novel lesions (Figure 2).



Figure 2: 15 days after topical scabies treatment.

Discussion

Crusted scabies rarely occurs in an immunocompetent patient and are usually associated with immunodeficiency conditions such as HIV, leukaemia, systemic lupus erythematosus, neurological diseases, congenital, or iatrogenic immunodeficiency (e.g., secondary to rituximab or prolonged use of topical corticosteroids) [4,5]. Classic scabies has a characteristic rash distribution because of immune-mediated and skin abrasion (e.g., rubbing, scratching).

While Norwegian scabies is due to an uncontrolled and massive mites and eggs infestation characterized by generalized and poorly defined erythematous patches that quickly develop prominent scaling. Lesions may become warty, crusted, and cracked. It mostly occurs on the scalp, hands, and feet. Nails are often thickened, discoloured, and dystrophic. Pruritus may be minimal or absent [6,7], while in the immunocompetent host, it has been reported that lesions were intensively pruritic [7].

Scabies infestation can be difficult to diagnose, it is usually made upon clinical and Dermoscopic features including the appearance and distribution of lesions. In some cases, skin scraping samples are taken for the detection of the mites and eggs by microscopy. The perplexity of our case has arisen a wide range of differential diagnoses, nevertheless, medical history and clinical features allowed us to put a finger on the right diagnosis. Various inflammatory, infectious, and neoplastic processes were described in the nipple and areola skin. It may include specific dermatitis, such as

Montgomery tubercles, duct ectasia, hyperkeratosis areolae mammae naeviformis. These entities may be secondary to underlying dermatoses as epidermotropic lymphoma, crusted scabies, breast hamartoma, or be iatrogenic (e.g., BRAF kinase inhibitor vemurafenib). Non-specific dermatitis is represented by contact eczema, friction, and atopic dermatitis.

Although mammary skin is rich in apocrine glands, hidradenitis suppurativa, and apocrine miliaria, rarely occur in this localization. Benign tumours are quite rare as florid papillomatosis of the duct, cutaneous lymphocytoma, as well as solitary leiomyoma. Infiltrating syringomatous adenoma of the nipple is a particular and exceptional lesion that deserves to be acknowledged by clinicians and pathologists since it is frequently befuddled with tubular carcinoma along with low-grade adenosquamous carcinoma of the breast [1,8]. In this report, we'd like to highlight this startling clinical picture, the significance of anamnesis that permitted to circumvent; an unpleasant biopsy of this body area, especially for women as it represents the most important external identification of femininity.

However, in front of any recent unilateral lesion on the nipple and/or areola, it is necessary to consider mammary Paget disease, thus performing mammographic examinations and skin biopsy. Exploration of either ductal carcinoma in situ or infiltrating ductal carcinoma must be done since its almost systematic association with the Paget's disease of the nipple, unlike the extramammary forms.

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