Asymptomatic Inguinal Micropapules in a Patient Treated With Chemotherapy

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Clinical History

The patient was a 32-year-old woman diagnosed 18 months earlier with nodular sclerosing Hodgkin lymphoma, Ann Arbor stage IIIA (supradiaphragmatic and infradiaphragmatic lymph node involvement and absence of B symptoms). She had initially been treated with 6 cycles of ABVD (adriamycin, bleomycin, vinblastine, and dacarbazine). On recurrence of the lymphoma, she was treated with 2 cycles of c-MOPP (cyclophosphamide, vincristine, prednisone, and procarbazine), which was substituted by GPD (gemcitabine, cisplatin, and dexamethasone) due to neurological toxicity (paraesthesias). It was then decided to perform autologous peripheral blood hematopoietic stem cell transplantation after conditioning with melphalan and whole-body irradiation. On day 5 after transplantation, asymptomatic skin lesions developed in both inguinal regions, initially diagnosed as candidal intertrigo. Ten days later, due to persistence of the lesions despite systemic antifungal treatment, the patient was referred to dermatology.

Physical Examination

Multiple, shiny, nonfollicular microcapsules were observed in both inguinal regions, over an erythematous-brownish plaque with poorly defined borders (Figure 1).

Histopathology

A punch biopsy was performed, aiming to include several papules. Hyperkeratotic cylinders were observed at the orifices of the acrosyringia. In the underlying eccrine ducts, the characteristic ductal epithelium had been replaced by squamous-type epithelial cells and isolated dyskeratotic cells (Figures 2 and 3).

What Was the Diagnosis?
Diagnosis
Eccrine squamous syringometaplasia.

Clinical Course
The skin lesions presented a favorable course without the need for treatment, and resolved completely 3 weeks after their appearance. Six months after autologous hematopoietic stem cell transplantation, the patient is in complete remission from her lymphoma.

Discussion
Eccrine squamous syringometaplasia is an uncommon dermatosis characterized by a histological pattern consisting of transformation of the glandular epithelium of the secretory coil or excretory part of the eccrine gland into squamous cells with or without intraductal keratinization. It is a reactive response of the eccrine ductal epithelium that typically develops in patients who are receiving chemotherapy (as occurred in this case), although cases have been reported after exposure to other toxins or in association with cancerous, infectious, or inflammatory skin lesions; it has even been reported as a primary form with no underlying disorder.

The most satisfactory hypothesis about its pathogenesis is that it is due to direct toxicity of the drug when this is excreted in the sweat, although these lesions may appear as a "recall phenomenon" in areas previously treated with radiotherapy, being triggered by the use of certain chemotherapeutic agents, or may even be due to extravasation of cytostatic drugs.

The period of time between the administration of the drug and the appearance of the skin lesions is very variable. They often develop as confluent erythematous plaques or papules associated with vesicles or even blisters. According to some authors, chemotherapeutic-related cases present lesions that develop preferentially on the palms, soles, axillas, and groins, which are the areas with the highest density of sweat glands, although lesions have been reported at many different sites.

The lesions are usually asymptomatic, although some patients report pain.

As this is typically a self-limiting, asymptomatic dermatosis, it is not usually necessary to withdraw the suspected causative drug. Topical and systemic steroids have been used for its treatment.

The differential diagnosis of eccrine squamous syringometaplasia should include neutrophilic eccrine hidradenitis, a disorder that usually occurs in patients with hematologic neoplasms treated with cytotoxic agents. In this condition, the lesions show a dense neutrophilic infiltrate around and within the eccrine ducts. The two conditions have been reported simultaneously, and it has been suggested that they form part of the spectrum of the same disease, and that eccrine squamous syringometaplasia may be a late phase of neutrophilic eccrine hidradenitis.

In our case, the most likely causative drug was melphalan, the last chemotherapeutic agent to be administered before the onset of the condition.

Eccrine squamous syringometaplasia should be included in the differential diagnosis of the toxic dermatoses, particularly in patients receiving chemotherapy, although there is no clear association with a specific drug or tumor type.

Conflicts of Interest
The authors declare no conflicts of interest.

References