Plantar Erythematosquamous Plaque


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Clinical History

The patient was a 52-year-old woman with no past medical history of interest, who was seen for a pruriginous lesion on the plantar surface of the right foot. The lesion had developed 8 months earlier and had not resolved after topical antifungal and corticosteroid treatment. The patient reported no other symptoms.

Physical Examination

A violaceous, erythematous plaque of 4 × 4.5 cm was observed on the right plantar arch, with polycyclic borders and peripheral, serosanguineous scabs (Figure 1). Palpation suggested infiltration. The physical examination was otherwise normal.

Histopathology

The biopsy showed an epidermis with characteristics similar to lichen planus: disappearance of the basal layer, wedge-shaped hypergranulosis, sawtooth rete ridges, and the presence of colloid bodies at the dermoepidermal junction (Figure 2). The most noticeable aspect from the histological point of view was the intensity of the lymphoid infiltrate, which occupied the whole papillary dermis and reached the upper reticular dermis, obliterating the dermoepidermal junction and also affecting the periadnexal dermis, forming a dense lymphoid accumulation around the sweat glands (Figure 3). These lymphocytes presented no nuclear atypia nor was there a tendency to epidermotropism (Figure 4). Molecular study was performed using the polymerase chain reaction and this detected monoclonal reordering of the TRG gene.

Other Complementary Tests

A general blood test was performed, with no significant findings. Culture for fungi was negative.

What Was the Diagnosis?
Diagnosis

Unilesional mycosis fungoides.

Clinical Course

The patient was treated with radiotherapy by electron beam radiation. Complete resolution of the lesion was achieved and, after one-and-a-half years of follow-up, the patient is asymptomatic. The follow-up blood tests and thoracoabdominal computed tomography scan showed no abnormalities.

Discussion

The unilesional presentation of mycosis fungoides was first described by Russell in 1981. It is a rare variant of mycosis fungoides that presents as a single lesion with histological findings that are indistinguishable from conventional mycosis fungoides. Clinically, unilesional mycosis fungoides can present as an indurated, psoriasiform, eczematous, follicular, poikilodermal plaque with hypopigmentation or hyperpigmentation. It can affect any part of the skin.

Mycosis fungoides with lichenoid histological characteristics has been reported very rarely in the literature and is the rarest histological variant. Lichenoid reactions have also been described in mycosis fungoides treated with radiotherapy and systemic chemotherapy. In our case, this cause can be excluded as the patient had not received any systemic treatment.

Presentation of mycosis fungoides on the palms or soles is uncommon and has been reported in approximately 0.6% of cases of mycosis fungoides. As it mimics other dermatoses, diagnosis is usually late, and biopsy of any treatment-resistant palmoplantar lesion is therefore to be recommended.

The differential diagnosis of unilesional mycosis fungoides includes pagetoid reticulosis or Woringer-Kolopp disease. Clinically, pagetoid reticulosis presents as a slow-growing plaque with an infiltrated, verrucous appearance, usually developing on the extremities. A number of authors agree that pagetoid reticulosis and unilesional mycosis fungoides are different entities, in which epidermotropism is a common phenomenon but much more intense in pagetoid reticulosis.

The treatment of choice for unilesional mycosis fungoides is superficial radiotherapy and surgical excision. The majority of the cases respond well to treatment and do not recur. For many authors, the behavior of unilesional mycosis fungoides is similar to that of indolent plaque mycosis fungoides.

In summary, our patient presented a variant of mycosis fungoides that is relatively rare, both for its histology and for its form of presentation.

Conflicts of Interests

The authors declare no conflicts of interest

References