Infection (2019) 47:877–878
https://doi.org/10.1007/s15010-019-01329-y

IMAGES IN INFECTION

Herpes simplex vegetans in a patient with primary myelofibrosis

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Received: 11 February 2019 / Accepted: 24 May 2019 / Published online: 4 June 2019

A 45-year-old woman was admitted to our department with painless ulcerated plaque at the left labial angle. The lesion had developed several months ago and was slowly enlarging. Upon admission, she had already received several ineffective antibiotic pretreatments. The patient had a history of primary myelofibrosis diagnosed 1 year ago, and was treated with a combination of hydroxycarbamid and ruxolitinib. Physical examination revealed an ulcerated nodule, 1–2 cm in diameter, located on the left labial angle (Fig. 1). Laboratory examinations revealed leukocytosis (21^9/L; normal range 4.4–11^9/L), anaemia (haemoglobin 8.7 g/dL; 13.0–18.0 g/dL) and increased serum lactate dehydrogenase (1313 IU/L; normal range 10–250 IU/L). Cultures from lesional smears for fungi and bacteria were unremarkable, and testing for HIV was negative.

A lesional punch biopsy revealed areas of cornified squamous epithelium with eosinophilic intranuclear inclusion bodies surrounded by a dense inflammatory infiltrate (Fig. 2a). There was no evidence for epithelial dysplasia or squamous cell carcinoma. Immunohistochemical staining was strongly positive for HSV (Fig. 2b), and PCR analysis from paraffin-embedded tissue revealed an infection with HSV type 1. We initiated acyclovir therapy with 500 mg three times a day for a total of 3 weeks as well as topical antiseptic treatment with fusidic acid cream, with significant clinical improvement. Four weeks later the lesion had almost completely disappeared.

Herpes simplex vegetans is a rare condition that primarily affects immunocompromised patients with myeloproliferative disorders or HIV. Clinically, lesions appear as vegetating hyperkeratotic, verrucous, eroded or ulcerated plaques and nodules, predominantly located at the mucocutaneous transition zones [1, 2]. Clustered vesicles, characteristic for HSV infection, are usually absent in herpes simplex vegetans. Depending on the clinical appearance and anatomical site (oral or anogenital), differential diagnoses of herpes simplex vegetans comprise condylomata acuminata and condylomata lata, pemphigus vegetans, deep fungal or bacterial infections, pyogenic granuloma, or cutaneous squamous cell carcinoma [3]. Intravenous virustatic therapy with acyclovir is the treatment of choice for herpes simplex vegetans. In contrast to conventional HSV infections, acyclovir should be administered for a longer period of time in herpes simplex vegetans, and should be continued orally until clearance of all lesions. Resistance to acyclovir is frequent [4].

Proper workup including biopsy is essential in patients with herpes simplex vegetans as lesions can mimic a broad

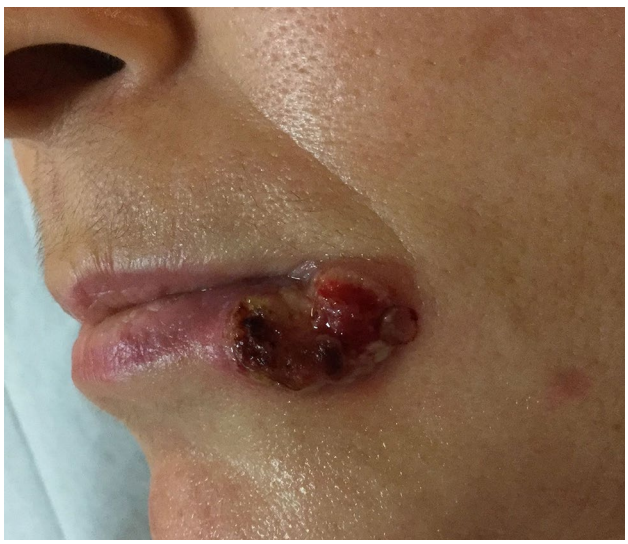

Fig. 1 The patient´s clinical findings at first presentation in our department. An ulcerated nodule, 1–2 cm in diameter, is located on the left labial angle

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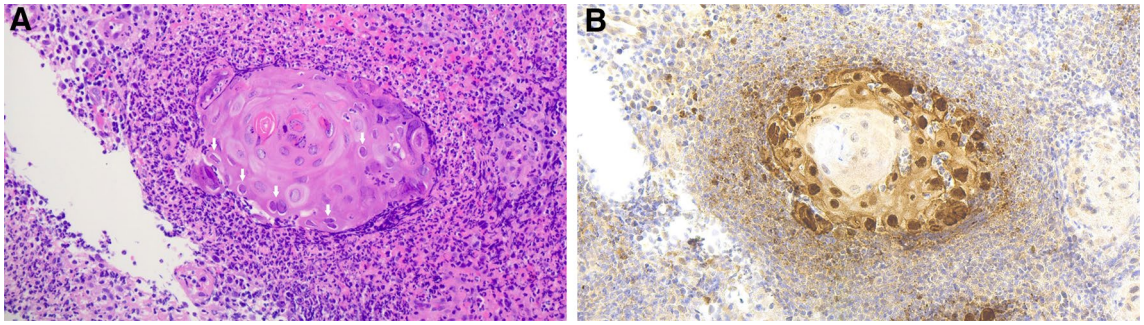

Fig. 2 **Aa** Histopathological findings of a lesional punch biopsy. Cornified squamous epithelium with numerous eosinophilic intranuclear inclusion bodies (arrows) is present in the centre surrounded by a dense inflammatory infiltrate consisting of lymphocytes, granulocytes and plasma cells. Haematoxylin and eosin staining, original magnification × 200. **b** Immunohistochemical analysis. Strong positivity of a polyclonal antibody against herpes simplex virus 1 and 2. Original magnification × 200

spectrum of cutaneous diseases including squamous cell carcinoma.

Compliance with ethical standards

Conflict of interest We declare the compliance with ethical standards and no competing interests.

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