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ORIGINAL ARTICLE

A case report of rare palmoplantar keratosis and nail dystrophy with imatinib

Rare cas clinique de kératose palmo-plantaire et dystrophie des ongles associées à l'imatinib

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KEYWORDS
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Summary A 48-year-old woman developed palmoplantar hyperkeratosis during treatment with imatinib (400 mg/day) for treatment of chronic myeloid leukemia. After 5 months of treatment, she developed plantar lesions with yellow-brownish plaques and palmar desquamations. The skin biopsy has eliminated psoriasis. Imatinib was discontinued, and treatment with an emollient balm and a soothing repair cream with an improvement of symptoms. A French imputability assessment score of I3 was obtained, indicating a probable relationship between the side effect and imatinib. In our case, the skin adverse events require definitive drug discontinuation and change of treatment.

MOTS CLÉS
Hyperkératose palmoplantaire ;
Imatinib ;
Dystrophie des ongles

Résumé Nous rapportons le cas d'une patiente âgée de 48 ans qui a développé une hyperkératose palmoplantaire durant son traitement par l'imatinib (400 mg/jour) pour une leucémie myéloïde chronique. Cinq mois après le début du traitement, la patiente a développé des lésions plantaires avec des plaques jaune-brunâtres et des desquamations palmaires. La biopsie cutanée a éliminé un psoriasis. L'imatinib a été discontinué avec installation d'un traitement

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à base d'un baume émollient et une crème réparatrice apaisante, Une amélioration des symptômes a été observée. L'étude d'imputabilité selon la méthode française a donné un score d'I3, ce qui indique une relation « probable » entre l'effet indésirable et la prise d'imatinib. Dans notre présent cas clinique, cet effet indésirable a nécessité un arrêt définitif du médicament et un changement de traitement.

Introduction

Imatinib mesylate is an oral chemotherapy anticancer agent, was found to potently inhibit Bcr-Abl family tyrosine kinases implicated in oncogenesis [1], and was used in the treatment of multiple cancers, especially for Philadelphia chromosome positive (Ph+) chronic myeloid leukemia (CML) for first-line treatment [2], indicated also for treatment of gastrointestinal tumors (GIST) [3], and dermato-fibrosarcoma protuberans [4]. Since its use, imatinib has caused different types of side effects, notably nausea, edema, cardiotoxicity, and 30% of patients who were treated with imatinib present a cutaneous toxicity [5].

The management of drug eruption involves identification and discontinuation of drug if possible, making a clinical assessment with a description of suspected lesions, looking for sign of severity and realizing a timeline of all drug outlets [6].

In the current case, we present a report of a palmar-plantar hyperkeratosis associated to imatinib mesylate with study of drug imputability. This adverse reaction has been identified within the framework of safety control system of pharmacovigilance unit in National Institute of oncology at University Hospital center, Rabat Morocco.

Case report description

A 48-year-old woman diagnosed with a CML 8 months later, a cytogenetic analysis was positive for Philadelphia chromosome; the BCR-ABL was detected at 36% according to International standard, treated with oral imatinib mesylate 400 mg/day since January 2015. The patient had neither comorbidity nor concomitant therapy.

Five months after regular therapy with imatinib was started, the patient developed rush skin, the lesions appeared in the keratosis areas, the dermatologist, was detected a plantar hyperkeratosis with yellow-brownish plaques (Fig. 1), as well as a multiple desquamation and psoriasiforms lesions on the knees, bows, palm and dorsa of hands (Fig. 2), and onychoclasis on toenails (Fig. 3). The mycological test of nail was negative; the skin biopsy has eliminated psoriasis.

Making the differential diagnosis, the dermatologist determines that it was a drug eruption. The plantar hyperkeratosis was considered grade III according to the Common Terminology Criteria for Adverse Events V4.0 (CTCAE) [7]. There was no personal or familial history comparable to cutaneous disease. The value of eosinophil was within normal limits (60 elements/mm^3). Imatinib had been discontinued since July 2015.

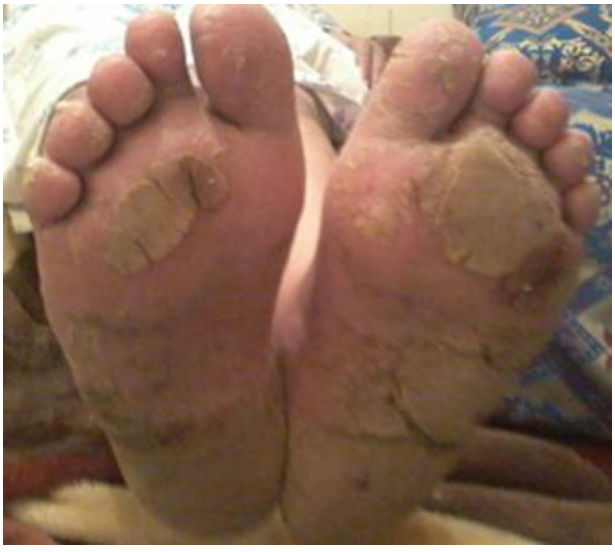

Figure 1. Plantar hyperkeratosis.
Hyperkératose plantaire.

The patient necessitated discontinuation of imatinib for 3 months; she received a treatment with an emollient balm and a soothing repair cream and terbinafine hydrochloride cream 1%. She had a partial remission. The internist doctor who makes the follow-up of the patient, decided for a change of the treatment to sunitinib. The lesions do not appear after the start of treatment with sunitinib.

A National Center of Pharmacovigilance conducted an imputability drug side effect analysis for the couple hyperkeratosis/imatinib, with French imputability for the causality assessment and adverse drug reactions [8,9]. A score of I3B3 was calculated. The patient gave her consent to publication.

Discussion

Palmoplantar keratoderma is a heterogeneous set of skin diseases, the common feature is a thickening of the stratum

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