Fixed drug eruption related to sunitinib: a case report

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Abstract

Sunitinib is an oral multi-targeted tyrosine kinase inhibitor. It has been approved for the treatment of gastro-intestinal stromal tumor and advanced renal cell carcinoma. Fixed drug eruption related to sunitinib is a rare cutaneous adverse drug reaction.

Keywords: tyrosine kinase inhibitors, sunitinib, fixed drug eruption

Introduction

Sunitinib is a multi-targeted tyrosine kinase inhibitor (TKI) and is available in capsule form. It was approved by the US Food and Drug Administration for the treatment of gastro-intestinal stromal tumor and metastatic renal cell carcinoma (RCC) and has been also found useful in treating colon cancer, breast cancer, and neuroendocrine tumors [1]. It inhibits angiogenesis by inhibiting vascular endothelial growth factor receptor (VEGF) 2, platelet derived growth factor receptor (PDGFR) β, fetal liver tyrosine kinase receptor-3 (Flt-3), and stem cell factor (C-Kit), [2]. Non-cutaneous side effects of sunitinib include hypertension, fatigue, diarrhea, and thyroid dysfunction [3]. Common cutaneous adverse drug reaction (CADR) related to sunitinib include hand-foot syndrome or palmoplantar erythrodysaesthesia (PPE), stomatitis, xerosis, alopecia, subungual splinter hemorrhage, and seborrheic dermatitis like reaction [1, 3].

Case Synopsis

A 65-year-old man, known to have RCC, presented to the dermatology out patient clinic with complaints of an itchy lesion on the dorsal aspect of his left hand for one day. He was on recurrent cycles of sunitinib which he took 50mg of the drug once a day for four weeks and remained off treatment for the next two weeks. He noticed recurrences of these lesions of the same morphology at the same site after every cycle of sunitinib. The present lesions also occurred after intake of sunitinib and developed within one day of taking the drug. Cutaneous examination revealed a violaceous macule on the first web space of the dorsum of the left hand (**Figure 1**). Other sites and mucosae were not involved. Hence, a diagnosis of fixed drug eruption (FDE) related to sunitinib was made and the patient was prescribed mometasone cream along with oral levocetrizine for a week.

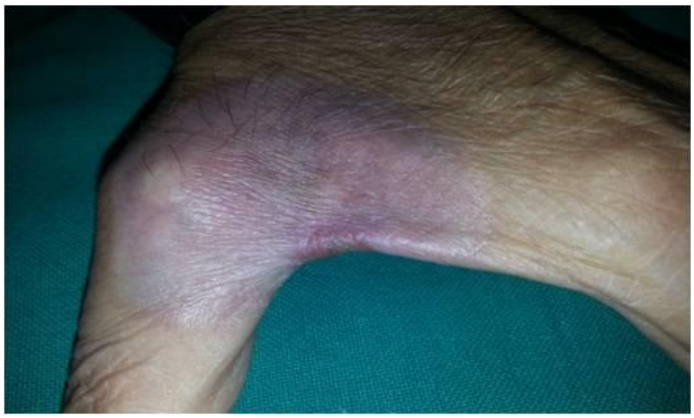

Figure 1. *Violaceous macule on the first web space on the dorsum of left hand.*

Causality assessment by Naranjo scale showed a score of >9, which qualified for definite adverse drug reaction. Since, his FDE was mild the patient was asked to continue on the same dose of sunitinib.

Case Discussion

Sunitinib is an otherwise well tolerated drug but CADRs like PPE, stomatitis, xerosis, alopecia, pigmentary changes, subungual splinter hemorrhage, and seborrheic dermatitis-like reactions can occur [1,3]. PPE is the most symptomatic CADR and can be associated with reddening, swelling, burning, tingling, and desquamation of hands and feet, which can affect the daily life of patients [4]. FDE related to sunitinib is a rare CADR. Isolated case reports of sunitinib-induced FDE are found in the literature [1]. Most of the CADRs caused by TKIs including those caused by sunitinib are not life threatening and are dose dependent. In such cases the 'culprit drug' need not be stopped, but merely lowering the dose of the drug can result in improvement of symptoms [4]. Our patient was taking sunitinib for advanced RCC and his complaint was of minimal itching only. Hence, no dose reduction was advised.

References

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