# Journal of Medical Pharmaceutical and Allied Sciences



Journal homepage: www.jmpas.com CODEN: JMPACO

### Case report

# Sunitinib induced fixed drug eruption

Anjali Lalani\*, Helly Sheth, Harsh Chudasama, Cyril Sajan,

Sumandeep Vidyapeeth (Deemed to be University), Piparia, Waghodia, Vadodara, Gujarat, India

#### ABSTRACT

Multikinase inhibitors have become first-line agents for the treatment of multiple systemic cancers. Sunitinib is an oral multitargeted tyrosine kinase inhibitor, most commonly used in renal cell carcinoma and gastrointestinal stromal tumor. Fixed drug eruption is a rare cutaneous adverse drug reaction.

Keywords: Renal cell carcinoma, Multitargeted tyrosine kinase inhibitors, Fixed drug eruption.

Received - 29-11-2021, Accepted- 02-01-2022

Correspondence: Anjali Lalani\* 🖂 anjalilalani83@gmail.com

Department of Pharmacy, Sumandeep Vidyapeeth (Deemed to be University), Piparia, Waghodia, Vadodara, Gujarat, India.

### **INTRODUCTION**

Fixed drug eruption is a cutaneous reaction that describes to development of one or more annular or oval erythematous patches in the body, as a result of systemic exposure to a medication. This reaction affects both ages but most commonly affects adults compare to children. Symptoms usually seen are pruritus (severe itches in the skin), burning, and pain. Common treatment of fixed drug eruption is a steroid and another one is the discontinuation of the suspected medication. Sunitinib is a tyrosine kinase inhibitor and this medication is used in the treatment of renal cell carcinoma by slowing down the growth of cancer cells. It is a type of targeted therapy multiple kinase inhibitor <sup>[1]</sup>. Sunitinib is normally administered as a50mg oral dose taken once daily for 4 weeks then 2 weeks off and repeat the cycle <sup>[2]</sup>. For the treatment of renal cell carcinoma and gastrointestinal stromal tumor (GIST), the US Food and drug administration approved the sunitinib on January 25, 2006. Adverse drug reactions of sunitinib can be seen in patients who are taking medication orally. The ADR of drug duration varies from person to person. (Table-1).

#### **Case report**

A 50-year-old man, known to have Renal Cell Carcinoma (RCC), presented to the out-patient clinic with complaints of an itchy and painful lesion on the palmer aspect of his both hands and feet for 15 days. He was on tablet sunitinib 50mg drug once a day for four weeks and remained off treatment for the next two weeks. Cutaneous examination revealed a violaceous macule on the ventral aspect of little finger of right hand and over the ulnar border of left hand (**Figure 1**). Other sites and mucosae were not involved.

He noticed disappearances of these lesions after stopping the drug (**Figure 2**). Hence, a diagnosis of fixed drug eruption (FDE) related to sunitinib was made and the patient was prescribed clobetasol cream along with oral prednisolone 30mg for 5 days.

#### DISCUSSION

Sunitinib is an otherwise well-tolerated drug but cutaneous adverse drug reactions like hand-foot syndrome, stomatitis, xerosis, alopecia, pigmentary changes, subungual splinter hemorrhage, andseborrheicdermatitis-like reactions can occur [4,5]. Hand-foot syndrome is the most symptomatic cutaneous adverse drug reaction and can be associated with reddening, swelling, burning, tingling, and desquamation of hands and feet, which can affect the daily life of patients <sup>[6]</sup>. Fixed drug eruptions related to sunitinib is rare cutaneous adverse drug reaction. Isolated case reports of sunitinib- induced fixed drug eruptions are found in the literature <sup>[4]</sup>. Most of the cutaneous adverse drug reactions caused by TKls 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 <sup>[6]</sup>. Our patient was taking sunitinib for RCC and his complaint was of severe itching accompanied by pain. Hence, the patient was advised to withhold the drug for two weeks and after one month the patient was recovered.

### Causality assessment

Scale's Name	Result
WHO Scale	Possible
Naranjo's Scale	Possible

### DOI: 10.55522/jmpas.V11I1.2489

Figure 1: Violaceous macule on the ventral aspect of the little finger of right hand and over the ulnar border of left hand

Before



Figure 2: After holding the drug disappearance of macules
After



Table 1: Common and severe	ADRs of Sunitinib <sup>[3]</sup>
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Mild effects	Hepatotoxicity Acute renal failure Adrenal	
	dysfunction	
Moderate effects	Venous thrombotic events Hemorrhoids	
	Pancreatitis	
	Flu-like syndrome	
Severe effects	Hand-foot syndrome Rash Constipation	
	Skin Discoloration Mucositis/stomatitis	
	Bleeding Asthenia	
	Dry skin Hair colour changes Alopecia	

### CONCLUSION

The main goal of any anticancer therapy is a favorable outcome for the patient. The reduction or interruption of Multikinase inhibitor therapy can adversely affect patient outcomes through the removal of a potentially life-sparing therapy. Therefore, the symptoms of cutaneous adverse drug reactions should be recognized as early as possible to initiate therapeutic management before withholding therapy becomes necessary.

#### ACKNOWLEDGEMENT

The authors are thankful to all the members of the Department of Pharmacy, Sumandeep Vidyapeeth Deemed to be University (SVDU) for their support.

## **CONFLICT OF INTEREST**

The authors declare no conflict of interest.

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# How to cite this article

Anjali Lalani, Helly Sheth, Harsh Chudasama, Cyril Sajan, 2022. Renal cell carcinoma, multitargeted tyrosine kinase inhibitors, Fixed drug eruption. J. Med. P'ceutical Allied Sci. V 11 - I 1, Pages - 4417 - 4418. doi: 10.55522/jmpas.V1111.2489.