

# A rare adverse reaction of sorafenib

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Sorafenib is a multikinase inhibitor thought to target vascular endothelial growth factor and its receptor. The European Medicines Agency (EMA) and Food and Drug Administration (FDA) approved the use of sorafenib in late-stage hepatic cellular cancer (HCC) on October 30, 2007, and November 19, 2007, respectively. It is the only drug approved for use in the systematic treatment of primary HCC, and it offers renewed hope for middle- and late-stage liver cancer patients. Conventional use of sorafenib is 400 mg orally, twice daily, until tumor progression or patient death. The following is a report of a serious episode of skin rash in a liver cancer patient at our hospital subsequent to treatment with sorafenib.

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A 47-year-old woman with a 10-year history of hepatitis B diagnosed with second clinical stage hepatic cellular cancer (HCC) of (T<sub>2</sub>N<sub>0</sub>M<sub>0</sub>), combined with cirrhosis, medium ascites, and portal hypertension, presented at the hospital. Surgical resection

or interventional therapy was not advisable for the patient, and the patient was started solely on oral 'sorafenib', 400 mg twice daily.

After taking sorafenib for a week, skin rash appeared on her head, face, back, and waist, manifested as skin rhagadia, maculopapule, and acneiform skin rash, combined with vesicle and seepage (Fig. 1). Vaseline and urea cream were repeatedly smeared on the skin after a wash with physiological saline; sorafenib was continued. The skin scabbed and the symptoms of redness and swelling disappeared (Fig. 2). Skin rhagadia on the head and face reduced over a 2-month period, and the general health of the patient improved. The patient was advised to take 400 mg of sorafenib, twice daily (Fig. 3).



**Fig. 1.** Following sorafenib treatment, skin rash began to appear. (A) Skin rash on the patient's waist. (B) Skin rash on the patient's face, after treatment with Vaseline and urea cream.



**Fig. 2.** The skin scabbed and the symptoms of redness and swelling disappeared after 2 months.



*Fig. 3.* The skin rash and scabbing improved gradually on the patient's face and waist, 6 months after onset.

#### Learning points

- 1) Sorafenib can cause terrible skin rash. There is evidence from previous studies that skin reactions correlate positively with the efficacy of drugs (1–3).
- 2) The most potent way of treating skin rash is washing it with physiological saline to keep the skin clean

and applying vaseline and moisturizer to keep the skin moist.

- 3) Even with serious skin rash, sorafenib may be continued during treatment.

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