Rifampicin-induced Burning: an Unusual Presentation

Sunil Dogra and Amrinder Jit Kanwar

Department of Dermatology, Venereology and Leprology, Postgraduate Institute of Medical Education and Research, Chandigarh-160012, India. E-mail: sundogra@hotmail.com Accepted August 27, 2002.

Sir,

Rifampicin is a semi-synthetic broad-spectrum antibiotic widely used in the treatment of tuberculosis and leprosy. Considering its enormous clinical use, cutaneous side effects are rare; it is seen in less than 5% of patients (1). Here, we report a patient who experienced a severe burning sensation all over the body following rifampicin use. To the best of our knowledge, this unusual rifampicin-induced side effect has not been reported previously.

A 32-year-old female patient was admitted with extensive psoriasis. She also had a history of left-sided chest pain, cough and low grade fever over the course of 2 months. Her baseline investigations including peripheral blood smear, cell counts, liver and renal function tests; other biochemical parameters were within normal limits. A skiagram of her chest and pleural fluid analysis revealed a diagnosis of pulmonary tuberculosis, for which she was started on antitubercular drugs (rifampicin + isoniazide + ethambutol + pyrazinamide). After baseline investigations, her psoriasis was managed with acitretin 25 mg twice daily. A week after starting antitubercular drugs, the patient complained of a severe intractable burning sensation all over the body, which would characteristically start in the morning. It was not relieved with antihistamines (hydroxyzine hydrochloride, doxepine) and sedatives (diazepam). The burning sensation gradually subsided by the evening, only to recur the next morning. This continued over the next 3 days. On the 4th day, the patient noticed that these symptoms started after she had taken rifampicin on an empty stomach in the morning. Rifampicin was therefore withheld for 2 days, during which she was completely asymptomatic. Next day, a challenge dose of rifampicin was administered. The patient experienced similar symptoms of intolerable burning all over body beginning 30 min after rifampicin intake, and this lasted for between 6 and

8 h. Subsidence of the burning sensations on stopping rifampicin and recurrence on challenge confirmed rifampicin as the culprit behind her disabling symptoms.

Various cutaneous side effects observed with rifampicin are acniform lesions, Steven-Johnson syndrome, maculopapular rash, erythema multiforme, pemphigus, urticaria, exfoliative dermatitis, porphyria cutanea tarda and fixed drug eruption (2). There is a single report of pruritis associated with intravenous use of rifampicin (3). In another report, Aziz et al. (4) described burning palms as an adverse effect to rifampicin containing antitubercular drugs. Initially, we were unable to find a cause for such burning sensations and considered it to be related to the acitretin. But on the patient's own observation, rifampicin was suspected and confirmed by stopping and rechallenging. In describing a hitherto unknown side effect of rifampicin, this report emphasizes the importance of listening carefully to what the patient has to say and also of the role of continuous pharmacovigilance in clinical practice (5).

REFERENCES

- 1. Girling DJ, Hitze HL. Adverse reactions to rifampicin. Bull World Health Org 1979; 57: 45-49.
- 2. Breathnach SM. Drug reactions. In: Champion RH, Burton JL, Burns DA, Breathnach SM, editors. Textbook of dermatology, 6th edn. Oxford: Blackwell Science, 1998: 3349-3517.
- 3. Walker-Renard P. Pruritis associated with intravenous rifampin. Ann Pharmacother 1995; 29: 267-268.
- 4. Aziz S, Agha F, Hassan R, Fairoz SA, Hasan K. Hepatotoxicity to different antituberculosis drug combinations. J Pak Med Assoc 1990; 40: 290–294.
- 5. Routledge PA, Lidquist M, Edwards IR. Spontaneous reporting of suspected adverse reactions to antihistamines: a national and international perspective. Clin Exp Allergy 1999; 29: 240–246.