Correspondence

Generalised Lichenoid Drug Eruption Accompanied by Hand-foot Syndrome Due to Capecitabine

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Indian J Dermatol 2018:63(1):83-4

Sir,

A 38-year-old female patient with breast cancer presented with itchy rash on the arms and feet and painful erythema on both palms and soles. She received oral capecitabine (Xeloda®) at a dose of 1250 mg/m² twice daily for 14 days in 21-day cycles during the past 10 weeks. The lesions had been present for the past 6 weeks, and they first appeared 4 weeks after the initiation of capecitabine treatment. The patient had no other concurrent medication. There was no history of medication for any other illness in the recent past. The physical examination revealed well-defined erythema, oedema, and desquamation on the palmoplantar region. The diagnosis of hand-foot syndrome was made based on clinical features. She also had erythematous papules and plaques predominantly on the forearms and legs but also on her back and abdomen [Figures 1 and 2]. The skin biopsy of a lesion on the dorsal aspect of the lower extremity revealed hyperkeratosis, irregular acanthosis with sawtooth pattern, spongiosis, eosinophils, and band-like lymphocytic infiltrate at the dermal-epidermal junction, interface dermatitis with vacuolar change in the basal layer, and apoptotic keratinocytes [Figure 2c]. Thus, the initial diagnosis of lichenoid drug eruption was confirmed by histopathology. Capecitabine therapy was stopped, and the patient was started on topical methylprednisolone and oral desloratadine 5 mg twice daily. In addition, two ampules each containing 6.43 mg betamethasone dipropionate and 2.63 mg betamethasone sodium phosphate were administered intramuscularly 15 days apart. The lesions healed completely after 5 weeks of the treatment.

Capecitabine is a chemotherapeutic agent which is metabolized to 5-fluorouracil. It is used in the treatment of colorectal and metastatic breast cancer. Hand-foot syndrome is a common cutaneous side effect of capecitabine. Hand-foot syndrome presents with dysesthesia, pain, bilateral well-defined erythema, oedema, blisters, ulceration, and desquamation on palms and soles.[1] The diagnosis of hand-foot syndrome is usually made by its clinical features. Treatment options include moisturising lotion, pyridoxine, dimethyl-sulfoxide, and oral corticosteroids. However, the lesions usually disappear spontaneously within a few weeks if the causative agent is discontinued.[2]

In addition to hand-foot syndrome, a few cases with photosensitive lichenoid drug eruption have been reported during capecitabine treatment.[3-4] Hague and Ilchyshyn...
reported a 73-year-old female patient with breast cancer who developed erythematous plaques on sun-exposed areas including neck and forearms 2 weeks after capecitabine treatment began. Walker et al described a 75-year-old female patient with breast cancer who developed violaceous papules on the dorsal aspect of the arms and legs and palmpoplantar erythema due to capecitabine. Walker et al claimed that they achieved marked improvement using topical clobetasol propionate 0.05% and systemic hydroxyzine without interrupting therapy. Moreover, Gehlhausen et al reported a 61-year-old female with photosensitive lichenoid eruption during capecitabine therapy for metastatic breast cancer. The patient was treated with topical triamcinolone. However, the lesions recurred when capecitabine treatment was re-introduced.

Systemic administration of 5-fluorouracil can cause photosensitivity. Prodrugs of 5-fluorouracil such as capecitabine and tegafur have been implicated in lichenoid eruptions. Therefore, it has been suggested that the lichenoid reaction might be related to a metabolite of the prodrug. Other cutaneous side effects of capecitabine include generalised rash, bullous eruption, onycholysis, alopecia, lichenoid stomatitis, subacute cutaneous lupus erythematosus, and cutaneous and mucosal pigmentation.

To the best of our knowledge, the coexistence of photosensitive lichenoid eruption and palmpoplantar erythema due to capecitabine has been previously reported only in one patient. The violaceous papules appeared on the dorsal aspect of the patient’s hands, forearms, and legs after sun exposure during summer. However, the patient we presented above had both hand-foot syndrome and generalised lichenoid drug eruption due to capecitabine simultaneously.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**References**

1. Gressett SM, Stanford BL, Hardwicke F. Management of hand-foot syndrome induced by capecitabine. J Oncol Pharm Pract 2006;12:131-41.
2. Qiao J, Fang H. Hand-foot syndrome related to chemotherapy. CMAJ 2012;184:E818.
3. Hague JS, Ilchshyn A. Lichenoid photosensitive eruption due to capecitabine chemotherapy for metastatic breast cancer. Clin Exp Dermatol 2007;32:102-3.
4. Walker G, Lane N, Parekh P. Photosensitive lichenoid drug eruption to capecitabine. J Am Acad Dermatol 2014;71:e52-3.
5. Gehlhausen JR, Strausburg MB, Aouthmany M, Katona TM, Turner MJ. Capecitabine-induced lichenoid drug eruption: A case report. Dermatol Online J 2017;23. pii: 13030/qt75n8m2zq.

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**How to cite this article:** Tamer F, Yuksel ME. Generalised lichenoid drug eruption accompanied by hand-foot syndrome due to capecitabine. Indian J Dermatol 2018;63:83-4.

Received: March, 2017. Accepted: January, 2018.