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Erythema multiforme-like drug eruption caused by sennoside

Dear Sir,

Erythema multiforme (EM) is an acute inflammatory disorder that affects the skin and mucous membrane. This eruption is induced by a wide variety of etiological agents including drugs and infections, especially herpes simplex virus (HSV) and mycoplasma.¹ Although sennoside is one of the most commonly used laxatives in the world, few cases of drug eruption have been reported in the international journals, but here we report a patient with an EM-like eruption caused by sennoside.

A 70-year-old woman presented with a 1-year history of recurrent pruritic erythema with iris or blister formation on almost the entire body surface (Fig. 1a). The patient had a 5-year history of hypertension treated with diltiazem. Because of constipation, the patient also had been taking sennoside occasionally for a year. A skin biopsy from the left thigh revealed necrosis of epidermal keratinocytes and infiltration of lymphocytes in the upper dermis, with vacuolation of basal cells (Fig. 1b). Serum tests for antibodies to HSV and mycoplasma suggested no current infection of the organisms. Diltiazem and sennoside were discontinued and the patient's eruption was improved but leaving pigmentation. However, the same eruption reappeared upon administration of a commercially available aloe, which was found to contain sennoside (Fig. 1c). A lymphocyte stimulation test was negative with diltiazem and sennoside. A patch test on lesional pigmented macules with 1% and 0.1% sennoside in petrolatum was regarded as a 2+ reaction on the International Contact Dermatitis Research Group scale, confirming that sennoside was the causative agent.

There have been a few reports of sennoside eruptions, including EM (two cases), fixed drug eruption (two cases),

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lichenoid reaction (two cases), toxic epidermal necrolysis (one case), urticaria (one case), photosensitivity (two cases), and interstitial granulomatous reaction (one case).^{2–5} As EM, fixed-drug eruption, and toxic epidermal necrolysis are encompassed by the same spectrum of graft versus host reaction,^{6,7} it should be noted that sennoside mostly evokes this spectrum of drug eruption as a herbal adverse effect.

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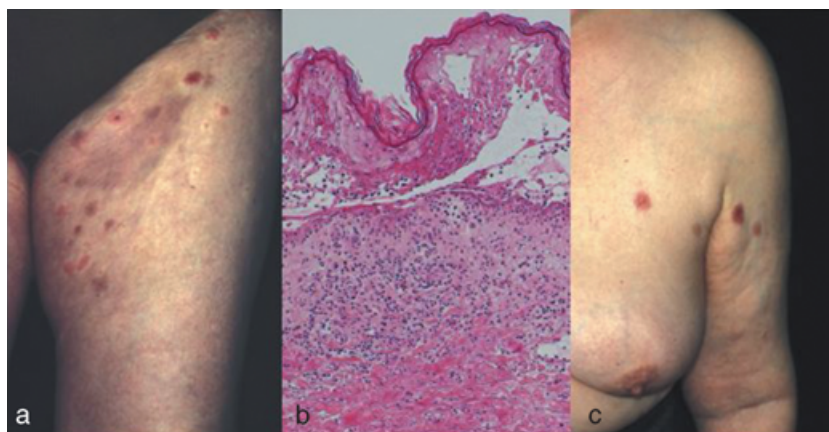


Figure 1 (a) Multiple erythematous lesions on the left thigh. (b) Histopathological view of an erythematous lesion, showing epidermal necrosis and lymphocyte infiltration (H&E $\times 100$). (c) Erythematous lesions upon re-administration of aloe