Toxic epidermal necrolysis due to co-trimoxazole

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A 30-year-old Saudi woman presented to the emergency department due to severe skin reaction following ingestion of half a tablet of co-trimoxazole by mistake, thinking it was aspirin. She was known to be hypersensitive to co-trimoxazole, and her doctor warned her not to take it, and issued her a card following her first reaction and advised her to carry it at all times, and show it whenever she met a doctor. That day she had a headache and took the drug by mistake instead of aspirin, she then felt severe pain and itching all over her body with breathlessness and increase in her heart beat. Examination revealed a fully conscious with pulse of 90/minute and respiration of 20/minute, temperature of 37^{o}C and a blood pressure of 150/90 mm Hg. There were no abnormal findings on ECG. Her eyes were congested and watery. There was a multiple macular skin rash all over her body with the exception of her face and trunk, with vesicles and desquamation of the skin on her buttocks, which looked exactly like scaled burns (**Figure 1**). Other systems were normal. Her blood tests showed slightly raised serum uric acid of 353 mmol/l (normal range, 142-336 mmol/l). She was diagnosed as having toxic epidermal necrolysis syndrome, was admitted to the burns unit, and received intravenous fluid therapy and erythromycin, as she was also allergic to penicillins, in addition to pethidine for her pain. She received daily dressing to her wounds using diluted Betadine and potassium permanganate, and was seen by the dermatologist and by the ophthalmologist. All wounds healed completely, and she was discharged 10 days following admission.

Toxic epidermal necrolysis syndrome is a rare life threatening condition described first in 1956.[1] The skin is the main affected organ with generalized maculovesicular rash that may involve the whole body,[1] with desquamation that resembles burns.[1] It is mainly caused by drugs.[1-3] The drug most commonly encountered is co-trimoxazole,[4] as in our case. Other etiological factors include malignancy, fungal, and viral infections.[1] The exact mechanism of its causation is not well understood. In all affected individuals, however, the epidermis peals off exposing the dermis, making it look exactly like superficial scald burns, (**Figure 1**). The mortality rate is high, ranging between 20-70%.[1,5] Treating these patients in burns centers together with the dermatologist, ophthalmologist, and the internist, lowers the mortality rate.[1] The eyes can be affected, as in our in case. Therefore, not every burn-like wound is due to burns, so history is very important in highlighting the exact cause of the problem. If these lesions were treated like burns by applying topical agents that contain sulfonamides, like sulfadiazine, disastrous outcome may occur, especially when the patient is unconscious as in severe cases.

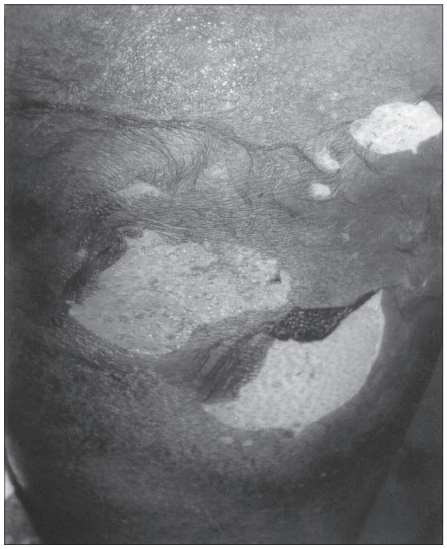

Figure 1 - Scald-like desquamation of the skin on buttocks of the patient.

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