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NOT THE USUAL CULPRIT DRUG! AN EXTREMELY RARE CASE OF TOXIC EPIDERMAL NECROLYSIS SECONDARY TO ITRACONAZOLE.

Dermatology

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ABSTRACT

Toxic epidermal necrolysis (TEN) is a severe mucocutaneous adverse reaction, potentially life threatening, which occurs mainly due to drugs and involves more than 30% of the body surface area. Here, we report an extremely rare case of TEN secondary to itraconazole developing in a young female who was prescribed itraconazole for tinea cruris with corporis. Cutaneous side effects of itraconazole are rare and usually mild. It can manifest as maculopapular rash, fixed drug eruption, urticaria and angioedema. But development of TEN secondary to itraconazole is extremely uncommon and rarely implicated as a culprit drug for TEN. In countries with high prevalence of tinea cruris and corporis, dermatologists and clinicians should be aware about the possibilities of adverse reactions that can occur due to itraconazole.

KEYWORDS

Toxic Epidermal Necrolysis, Itraconazole, Drug Reaction

INTRODUCTION:

Toxic epidermal necrolysis (TEN) is a severe mucocutaneous adverse reaction, potentially life threatening, which occurs mainly due to drugs and involves more than 30% of body surface area. TEN is a dermatological emergency which needs early intervention and prompt treatment to prevent the complications and to reduce mortality. Here, we report an extremely rare case of TEN secondary to itraconazole developing in a young female who was prescribed itraconazole for tinea cruris with corporis.

Case Report:

A 21-year old female presented with reddish rashes and small blisters over her face, chest, abdomen, back, upper limbs and lower limbs since 2 days (the day she presented to us). She had visited a physician for tinea cruris with corporis for which she was prescribed oral itraconazole 200mg/day for 1 month.

She started taking the tablets from the same day itself (Day1). Following this she developed burning sensation of both the eyes, fever and difficulty in swallowing (day 9). Her attender reported development of flat red lesions over the chest, back and thighs the next day (day 10).

When she came to our hospital (Day 11), cutaneous examination revealed multiple dusky erythematous to purpuric macules distributed over both lower limbs, upper limbs, axillae, palms and soles and few flaccid vesicles and bullae distributed over chest, abdomen, back and face, accounting to involve approximately 50% of body surface area (Figure 1). Erosions were present over both the lips and genital mucosae (Figure 2).

Severe eyelid oedema and conjunctival congestion was noted. Pseudo-nikolsky sign was positive. A diagnosis of toxic epidermal necrolysis secondary to itraconazole was made clinically and with the history provided and was advised to stop the culprit drug immediately. She was admitted in intensive care unit (ICU) and routine investigations were done.

There was raised erythrocyte sedimentation rate, C-reactive protein and serum urea. Based on SCORTEN (score =2), mortality risk was estimated to be 12.1%. She was started on injection dexamethasone 16mg/day and oral cyclosporine at a dose of 4mg/kg/day along with adequate supportive care, to which she responded well. She was discharged after three weeks.

Cutaneous lesions healed with post-inflammatory hypopigmentation (Figure 3) and she had a sequelae of corneal erosions for which ophthalmologist treated her with topical antibiotics and lubricants.

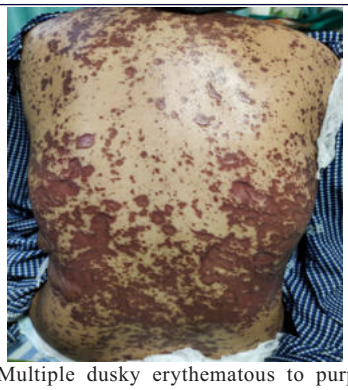

Figure 1: Multiple dusky erythematous to purpuric macules coalescing to form patches with few bullae distributed over the back

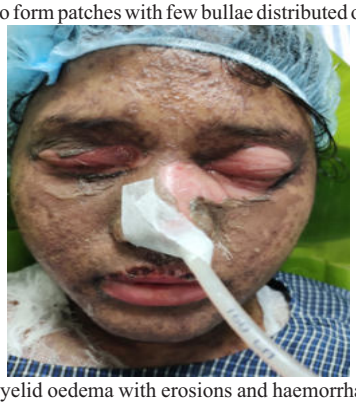

Figure 2: Eyelid oedema with erosions and haemorrhagic crust noted over the upper lip

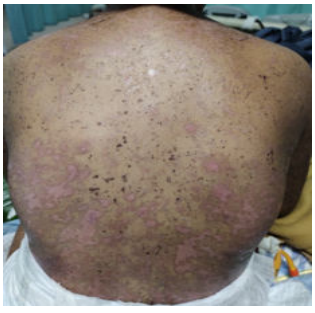

Figure 3: Cutaneous lesions healed with post-inflammatory hypopigmentation

DISCUSSION:

Using Naranjo probability scale, the relationship between itraconazole and SJS/TEN was found to be "probable" (Naranjo score = 6),[5] and as per the World Health Organization-Uppsala Monitoring Centre criteria it was found to be "probable/likely".[6] According to modified Hartwig and Siegel ADR severity assessment scale, we graded the reaction as "Level 5" (severe).[7] As per algorithm of drug causality for epidermal necrolysis (ALDEN) score, the reaction was labelled as "possible" (score + 3).[8]

Itraconazole belonging to triazole class of antifungals, that inhibits ergosterol synthesis, is one of the commonest drug used for treating dermatophytosis. Cutaneous side effects of itraconazole are rare and usually mild. It can manifest as maculopapular rash, fixed drug eruption,[3] acute generalized exanthematous pustulosis, urticaria, angioedema, symmetric drug-related intertriginous and flexural exanthema (SDRIFE),[4] and anaphylaxis. But development of TEN secondary to itraconazole, is extremely uncommon and rarely implicated as a culprit drug for TEN with only two cases of SJS-TEN overlap syndrome reported so far.[1,2]

In a country like India, where superficial dermatophytosis like tinea cruris and corporis is so common among the people, dermatologists and clinicians should be aware about the possibilities of adverse reactions that can occur due to itraconazole, a commonly prescribed drug for almost all patients with tinea infections. We believe that this is the first case of full blown TEN secondary to itraconazole reported in the literature till now to our best knowledge.

Legends:

Figure 1: Multiple dusky erythematous to purpuric macules coalescing to form patches with few bullae distributed over the back

Figure 2: Eyelid oedema with erosions and haemorrhagic crust noted over the upper lip

Figure 3: Cutaneous lesions healed with post-inflammatory hypopigmentation

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