Fluconazole induced multifocal bullous eruptions: a case report

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ABSTRACT

The term bullous drug eruption refers to adverse drug reactions that result in fluid filled blisters. Blistering can be due to various medications. A 22 year old primigravida developed bullous lesions on upper limbs, lower legs and face after taking six doses of lumether forte (artemether 80 mg + lumefantrine 480 mg themis medicare ltd) and difenac plus (diclofenac 50 mg + paracetamol 500 mg intermed), and single dose of flucan (fluconazole 150 mg Bombay tablet Mfg co) and mebex (mebendazole 100 mg Cipla Limited). She had a previous history of localized bullous eruption 2 years back after taking a single dose of forcan (fluconazole 150 mg Cipla Limited) for vaginal candidiasis. There are reported cases of bullous eruptions due to diclofenac, mebendazole and paracetamol. However in our case past history of localized bullous eruptions after taking fluconazole, made it superior to other offenders to be suspected as the “probable” culprit. Naranjo causality score was (…+5…).

Keywords: Fluconazole, Bullous eruption, Candidiasis, Naranjo causality score

INTRODUCTION

Bullous eruptions are seen in various cutaneous disorders like pemphigus vulgaris, bullous pemphigoid, gestational pemphigus, dermatitis herpetiformis, linear IgA disease, toxic epidermal necrolysis and Steven Johnson syndrome.1,2

Fluconazole is a triazole antifungal drug and is used for various superficial and deep mycosis. Though there are some reported cases of localized fixed drug eruptions1, Steven Johnson syndrome and TEN due to fluconazole incidences of such atypical multifocal bullous eruptions are rare.2,4

CASE REPORT

A 22 year old 24 weeks primi presented in the dermatology OPD with complains of multiple blistering without any itching or discharge. History revealed a week ago she was suffering from fever and generalized body ache. Two days after a local hospital she was diagnosed positive for plasmodium vivex and was prescribed tab lumether 560 mg and tab difenac plus twice daily for 3 days. After 2 days of therapy she was recovering well and went to her gynecologist for routine antenatal check-up and complained of white discharge and perianal itching. There she was prescribed single dose of mebex 100 mg and diflucan 150 mg. The day after completing the full advised regime she noticed sudden appearance of dreadful blisters in various parts of her body. She immediately reported to our dermatology OPD. We admitted the case. An initial provisional diagnosis of gestational pemphigoid was made, but later ruled out due to absence of trunk lesion and involvement of face, palm and soles with rapid healing of lesions.6 On examination multiple pleomorphic bullous lesions were noted in the upper limbs, lower limbs below the knee, face, palm and soles but no mucosal involvement. Some of the blisters

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were ruptured and rest had a surrounding erythematous base.

Figure 1: Multiple bullous lesions on upper limb.

Figure 2: Tense blisters in lower limbs.

Figure 3: Healed lesions of upper limb.

Figure 4: Healed lesions of lower limbs.

There was no constitutional symptom except fatigue for iron deficiency anemia. Routine blood tests were within normal limit. Ultrasonography revealed normal feetal well-being.

After admission she was given injection taxim (cefotaxime 1 gm) iv twice daily, tab levociz (levocetrizine) twice daily, tab wysolone (methylprednisolone 40 mg) once a day after breakfast, Iron and calcium tablet once a day, GV lotion and fucidin cream twice daily. There was gradual healing of lesions which started in face followed by upper limbs and lower legs.

DISCUSSION

Bullous or blistering drug eruptions are one of the severe types of adverse drug reactions. Based on the various mechanisms, bullous drug eruptions may be fixed drug eruption, erythema multiforme minor, Stevens-Johnson syndrome, toxic epidermal necrolysis, drug-induced pemphigus, drug-induced pemphigoid or drug induced linear IgA dermatosis. Studes have reported the preferential activation of drug-specific CD8+ T cells in the pathophysiology of various bullous drug eruptions. Most bullous drug eruptions resolve without significant sequelae once the offending drug is removed. However, the morbidity of these reactions is proportional to the extent of involved surface area of the skin and mucous membrane.

Fluconazole is a triazole antifungal agent. The azole inhibits synthesis of ergosterol, the main sterol in the fungal cell membrane. A single dose of 150 mg is effective in uncomplicated vaginal candidiasis. Side effects include nausea, headache, skin rash, vomiting, abdominal pain, and diarrhoea. Rare cases of deaths due
to hepatic failure or Stevens-Johnson syndrome have been reported.\textsuperscript{10}

In our case Immunofluorescence and histopathology could have help us to arrive at a definitive diagnosis but could not be done due to financial issues.

Even after extensive search to the best of our effort we were unable to find any reported case of bullous eruptions due to artemether or lumefantrine. But bullous fixed drug eruptions due to fluconazole, diclofenac, paracetamol and mebendazole have been reported in various literatures.

To determine whether our case was due to adverse drug reactions or caused by other factor we used Naranjo’s algorithm. In comparison to other suspected drugs mebendazole (+4) diclofenac (+4) and paracetamol (+4); a +5 score attributed fluconazole as a superior offender.

**CONCLUSION**

Multifocal bullous eruption is one of the serious adverse cutaneous drug reactions. Though there are reports of localized fixed drug eruptions due to fluconazole such atypical presentation as appear in our case is rare. Fluconazole is commonly used for various fungal infections. So, Physicians must be aware about possibilities of this type of occurrence and allergic drug history should always be elicited before prescribing fluconazole.

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