Acute generalised skin rash secondary to the Nystatin Oral Suspension

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DESCRIPTION

A 65-year-old male presented to emergency room (ER) for the complaint of skin rash of 2 days duration. Recently, patient was diagnosed with lung cancer for which he was receiving chemotherapy (cisplatin 60 mg/m² on day 1 and etoposide injection 120 mg/m² on days 1, 2, 3 planned for total duration of 4 cycles). On the 10th day following the 3rd cycle, patient developed oral thrush for which he was prescribed topical antifungal, nystatin oral suspension for swish and rinse. However, the next day, he started developing skin rash predominantly involving upper chest, neck and back. The skin lesions were diffuse, ill-defined, multiple, erythematous maculopopular and non-pustular (figures 1 and 2). No evidence of haemodynamic instability, fever, neutropenia, respiratory distress was noted, thereby ruling out the common etiologies like anaphylactic shock, febrile neutropenia, viral exanthem and so on. Review of his medical records and medication list suggested no recent changes apart from addition of nystatin. Hence, a possible diagnosis of drug rash secondary to nystatin was considered and was replaced with oral fluconazole. Subsequently, no new skin rash was noted, and old lesions gradually faded over next 1 week. Nystatin induced drug rash was documented in patient's allergy list.

Skin eruptions have wide differentials, especially when patients are on chemotherapy.¹ Any case with skin lesions should be thoroughly evaluated for paraneoplastic syndrome, viral exanthem, Sweet's syndrome, leukaemia cutis, allergies, drug reactions, thrombocytopenic purpura and so on.² Nystatin is formulated in variety of forms: capsule (for intestinal candidiasis), cream/ointment/powder (for candida diaper dermatitis), oral suspension (for oropharyngeal candidiasis), vaginal tablets (for vulvovaginal candidiasis). Acute generalised exanthematous pustulosis, type IV hypersensitivity and contact dermatitis have rarely been reported in association with nystatin.^{3–6} Patch testing, histological

Figure 2 Back of the patient showing similar scattered maculopapular skin lesions.

examination and oral challenge test are often helpful in confirming the diagnosis.^{3–6} Our patient declined for both skin biopsy and patch testing; however, temporal correlation of developing skin lesions on initiating nystatin and dermatological recovery after discontinuing it confirmed the diagnosis. Many newer anticancer drugs have potential to cause dermatological adversities and hence an up-to-date knowledge is warranted while managing such patients.^{7–11}

Learning points

- ▶ Contrary to general consensus, topical nystatin can have systemic allergic response.
- ▶ Any skin lesion should be thoroughly investigated for infection, infiltration, paraneoplastic syndrome and allergies.
- ▶ Review of electronic medical records and medication list can be of extreme importance to verify the offending drug.

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Figure 1 Image (front view) showing diffuse, ill-defined, multiple, erythematous maculopapular rash over upper chest and neck, at few locations, lesions are coalescing to form patch as well.

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