INTRODUCTION

Alcohol addiction is a common problem in Indian society. Psychiatric counseling and supervised disulfiram drug therapy[1] are frequently used for alcohol de-addiction. Here, we report a rare case of acute generalized exanthematous pustulosis (AGEP) to disulfiram in a 47-year-old Indian male. This is probably second such case report.

CASE REPORT

A 47-year-old male presented with fever, progressive, generalized, severe itchy eruptions on trunk and limbs for 2 weeks. History taking revealed that he is taking disulfiram from a psychiatrist for his alcohol addiction since a month. In addition, he was on antipsychotic medicines for 8 months. There was no history of any application or exposure to any chemical prior or after the eruption. On examination, he had pustules on diffuse erythematous background on the trunk and legs. At places, crusting and erosions were seen. On forearms, diffuse erythema with tiny vesicles and pustules were seen [Figure 1]. On the back, multiple vesicles, bullae, and pustules were seen. Hence, the drug rash due to disulfiram was suspected and disulfiram was stopped. Furthermore, the antipsychotic drugs were withheld for some time. The patient was treated with topical and systemic steroids. His rash subsided. There was no recurrence of rash.

After around 1 year, he presented with a diffuse extensive erythematous rash all over the body with oral involvement and fever. History taking revealed that the psychiatrist retried disulfiram for his bout of alcoholism 15 days ago. Moreover, after 9 days, the patient started having itching and erythematous eruption on the body which were started on the face and spread downward. On examination, he had involvement of face, trunk, limbs, and oral cavity. There was extensive erythematous edematous rash with few small pustules on abdomen, back, upper limbs, and legs [Figure 2]. On the face, toxic erythema was noted and few scattered small pustules on nose were seen. Erythematous and purpuric lesions were seen on the legs. The buccal mucosa was ulcerated on both sides. The disulfiram was stopped. Blood investigations were done. Hemogram showed neutrophilic leukocytosis. Serum chemistry was within normal range. Gramstain from pustules on both occasions showed sterile neutrophilic pustule. The patient denied biopsy on both occasions and did not allow patch test.

Pustular psoriasis and Sneddon–Wilkinson disease (subcorneal pustular dermatosis) were the close differential diagnosis. No previous history of psoriasis, absence of flexural, genital, and nail involvement, and no typical lesions of psoriasis in the recent past ruled out the diagnosis of pustular psoriasis. Febrile male, involvement of face, oral mucus membrane, absence of flexural predilection, and no
half-filled pustule with level ruled out Sneddon–Wilkinson disease.

**DISCUSSION**

AGEP is a curious type of reaction commonly seen with anti-infective agents such as macrolides and beta-lactams. It is characterized by fever, cutaneous eruption with nonfollicular sterile pustules on an edematous erythematous background. Our patient presented similarly with fever, erythema, and pustules. In addition, our patient had erythema multiforme-like target lesions, vesicles, and flaccid bullae. These additional skin lesions in AGEP have been described in literature.\(^2\) Recurrence of rash after re-intake of disulfiram induced similar presentation in a short span.

The temporal relationship and unintentional re-challenge confirmed our suspicion of disulfiram-induced drug reaction. The diagnosis of AGEP requires supportive evidence by histopathology and patch test. It could not be done due to patient’s unwillingness. However, similar recurrence after unintentional re-exposure points strongly toward disulfiram.

Toxic pustuloderma (AGEP) induced by disulfiram has been reported in literature by Larber et al.\(^3\) To the best of our knowledge, this is probably the second such report.

The disulfiram can induce multiple cutaneous reactions.\(^4,5\)

The acneiform eruptions, dermatitis, exanthema, purpura, rashes, urticaria, and vasculitis are reported in literature.\(^6\)

Disulfiram induces eczema in patients sensitized to rubber. It cross reacts with rubber.\(^7\) Similarly, flare up of cobalt and nickel dermatitis recall during disulfiram therapy is also known.\(^8\) Although far more serious reactions commonly occur due to disulfiram, early recognizing and treating skin reactions are equally important.

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**Conflicts of interest**

There are no conflicts of interest.

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