After preliminary laboratory blood and urine examinations, which turned out to be normal, his treatment was started with intramuscular injection of haloperidol and injection promethazine given at once nightly dose for 4 days. Table trisperidone (4 mg) was then started that was increased to 8 mg/day and was continued along with trisixiphenidyl (2 mg) at morning. This was continued for 42 days. He developed hypertriglyceridemia on routine blood tests and both trispers isidone and trisixiphenidyl were tapered down over 7 days and stopped. Aripiprazole was started at a dose of 10 mg the next day. The dose was increased to 20 mg in 7 days and was continued.

Nine days after starting aripiprazole, he developed pinhead-sized morbilliform maculopapular skin rashes [Figure 1] which were scarlet red colored, surrounding the hair follicles with occasional coalescent rashes that were pruritic, nonscaly, and it spreaded in a centrifugal pattern from its initial site of origin, i.e. anterior aspect of the chest and abdomen to the upper and lower limbs sparing.

A 21-year-old Hindu unmarried male was admitted in a tertiary care psychiatric hospital with the complaints of suspiciousness, fearfulness, and auditory hallucinations for 1 year, based on which he was provisionally diagnosed as paranoid schizophrenia (F20.0) according to the International Classification of Diseases, Tenth Edition.

Adverse skin reactions are an important type of adverse drug reactions which have been reported with a wide variety of psychotropics including both typical and atypical antipsychotics. Like typical antipsychotics, atypical antipsychotics such as olanzapine, risperidone, and paliperidone have been documented to cause skin reactions. Reports of aripiprazole-induced skin reactions are sparse. We report a case of skin rash that developed after starting aripiprazole in a male patient suffering from schizophrenia and which remitted after the drug was stopped.

CASE REPORT

A 21-year-old Hindu unmarried male was admitted in a tertiary care psychiatric hospital with the complaints of suspiciousness, fearfulness, and auditory hallucinations for 1 year, based on which he was provisionally diagnosed as paranoid schizophrenia (F20.0) according to the International Classification of Diseases, Tenth Edition.

Adverse skin reactions are an important type of adverse drug reactions.[1] Such reactions have been reported with both typical and atypical antipsychotics,[2] the prevalence of which has been estimated to be around 5%[3] and range from mild reactions to major life-threatening events.[3] Apart from typical antipsychotics, atypical antipsychotics such as olanzapine,[4] risperidone,[5] and paliperidone[6] also cause skin reactions. Reports of aripiprazole-induced skin reactions are sparse. We report a case of skin rash that developed after starting aripiprazole in a schizophrenia patient and which remitted after the drug was stopped.
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A dermatological opinion was taken who excluded these rashes to be of any infectious or systemic etiology and opined it to be a possible drug effect. Laboratory blood investigations revealed normal blood counts and normal biochemical parameters.

Aripiprazole was stopped 1 day after the onset of the rashes and they were found to be gradually waning off after 24 h of stoppage both in size and its distribution and completely disappeared in 4 days of its onset starting from the chest and abdomen and ending in the limbs (in the same fashion in which it appeared).

Thus, rash developed after 9 days of starting aripiprazole and waned off after 4 days of its discontinuation. Haloperidol tablet was started 4 days after stopping aripiprazole at a dose of 5 mg and titrated upward to 10 mg. The patient was seen successively every month for the next 3 months. He was maintaining well and attending to his studies again.

DISCUSSION

Aripiprazole is an atypical antipsychotic having partial agonistic action at dopamine (D2) and serotonin (5HT1a) receptors and antagonistic action at serotonin (5HT2a) receptors. It thus stabilizes both dopamine and serotonin systems.

Morbilliform skin rashes are the common type of drug-induced skin rashes. They generally begin within 1–2 weeks of starting of an agent and they fade within the same time on discontinuing the drug.[1] Roujeau and Stern[7] described several criteria that are helpful in defining a cutaneous drug reaction: (1) other causes for the eruption, such as viral exanthem, should be excluded; (2) a temporal relationship between drug use and onset of the rash should exist; (3) improvement should be noted following drug cessation; (4) reactivation upon rechallenge of the drug should be noted; and (5) the cutaneous reaction is known to be associated with the drug in question. In our case, the rash started after 9 days of starting aripiprazole and faded after 4 days of stopping it. Other possibilities such as systemic and infectious etiologies are excluded and, a temporal relation between the drug use and onset of rash and improvement after stopping is noted.

Existing literatures reported extensive lichenoid drug eruption predominated by exfoliative rashes and pus with aripiprazole monotherapy that needed surgical debridement[8] and also evidence of Stevens–Johnson syndrome (SJS) that occurred when lamotrigine was used concomitantly with aripiprazole.[9] Taking in view that lamotrigine is more implicated to cause SJS,[10] question arises whether aripiprazole increases the risk of SJS with lamotrigine.[9] In our case, we did not encounter such threatening skin reactions, and the morphology was limited to benign morbilliform maculopapular rashes.

The skin rashes in our case occurred after 9 days of treatment with 20 mg of aripiprazole though literature has documented severe skin reaction with 15 mg of the same drug after 2 weeks of prescription.[8]

Erythematous maculopapular skin rashes have also been documented with risperidone, but literature search has found it to occur in intertriginous and flexural body aspects[5] and also documented the role of long-acting injection risperidone as causative.[11] We did not encounter the rashes even after 42 days of using oral risperidone and so it can be excluded as a possible causative. The question of rechallenging with aripiprazole to exactly diagnose drug-induced skin reaction is debatable and not feasible due to ethical considerations.

CONCLUSION

The skin rashes in our case possibly point to aripiprazole as the causative agent as far as existing evidences are concerned, though further causal evaluation is warranted. Other possible etiologies for the rashes also need to be taken into picture. These include environmental irritants, soaps, shampoo, laundry detergents, food allergens, or any undiagnosed medical condition, to name a few. Additional investigations are thus required such as skin biopsy and...
histopathology. Nevertheless, awareness in the medical community about the possible skin manifestations with aripiprazole is essential so as to guide necessary precautions and treatment.

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**Conflicts of interest**
There are no conflicts of interest.

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