INTRODUCTION

Cytarabine or cytosine arabinoside is an integral part of treatment of acute myeloid leukemia (AML). Cutaneous reaction such as erythematous rashes is rare but known benign side effect of cytarabine. They are usually noted on hands and feet thus leading to the popular. Correct attribution of the cause of skin reaction is important for appropriate management and early counseling of parents to ameliorate their anxiety.

CASE REPORT

An 8-year-old girl with newly diagnosed case of high risk AML with FMS-like tyrosine kinase 3 internal tandem duplication positive status, was started on induction chemotherapy with cytarabine (100 mg/m²/dose twice a day for 10 days), daunorubicin (60 mg/m²/day for 3 days), and etoposide (100 mg/m²/day for 5 days). On day 4 of treatment, child started to develop maculopapular, erythematous, non-blanching, and pruritic rashes which was initiated from bilateral upper limb, anterior chest and anterior chest. There were no blisters, conjunctival, or mucosal involvement. The rash was well tolerated after symptomatic treatment and improved after 28th day of treatment. Although the rash looks aggressive, there were no associated symptoms and disappear without subsequent sequelae. Due to benign nature of this rashes, cytarabine therapy should not be stopped.

DISCUSSION

The incidence of dermatological toxicity following chemotherapy is reported in 2–72% patients. Cytarabine
is a chemotherapeutic agent which inhibits pyrimidine synthesis. This drug is effectively used in the treatment of AML. Among all side effects, dermatological adverse reaction is not rare and mostly seen in high dose but varied in different studies ranging from 39% to 55%.1-3 Ruben et al., showed that 18% cutaneous reactions may occur in low dose cytarabine (<1 g/m²) also.4 There is no consensus currently on the relationship between dosage and cutaneous reactions of cytarabine.5 It is also not associated with age of patient, concurrent administration of allopurinol, or other chemotherapeutics. It is less in patients who receive concurrent steroids along with cytarabine such as in Non-Hodgkin Lymphoma. In our case, since it was observed in standard dose of cytarabine, histopathological examination to rule out alternative diagnoses such as leukemia cutis, Sweet syndrome, and leukocytoclastic vasculitis was not done. However, the overall clinical history such as time of onset of rash, area of involvement, and drug exposure uphold the diagnosis. As rash was transient in nature, changing of medication was not necessary but rapid evaluation of symptoms is necessary to differentiate from life-threatening infections in these fragile patients.

REFERENCES