



DRUG RASH WITH EOSINOPHILIA AND SYSTEMIC SYMPTOMS SECONDARY TO PHENYTOIN

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Article Received on 29/01/2023

Article Revised on 19/02/2023

Article Accepted on 12/03/2023

ABSTRACT

Drug rash with eosinophilia and systemic symptoms syndrome is a serious idiosyncratic drug reaction. It develops anywhere from 2 to 8 weeks after initiating the offending drug with variety of clinical manifestations, usually fever, rash, lymphadenopathy, eosinophilia, and visceral organ involvement, most commonly hepatitis. The mortality rate associated with DRESS syndrome is approximately 10%, the most common cause being fulminant liver failure.

KEYWORDS: Eosinophilia, erythroderma.

INTRODUCTION

DRESS syndrome is a complex syndrome with a broad spectrum of clinical features. It is characterized by skin rash, fever, pharyngitis, lymphadenopathy, and visceral organ involvement, typically presenting within 2 to 8 weeks of initiation of therapy.^[1] The cutaneous manifestations typically consist of an urticarial, maculopapular eruption and, in some instances, vesicles, bullae, pustules, purpura, target lesions, facial edema, cheilitis, and erythroderma with associated leukocytosis with eosinophilia.^[2] Visceral involvement in the form of hepatitis, pneumonitis, myocarditis, pericarditis, nephritis, and colitis is the major cause of morbidity and mortality.^[3] Certain diagnostic tools have been tried to predict the possibility of DRESS in certain patients. It has been reported that the earlier the drug withdrawal, the better the prognosis.^[4] Treatment is largely supportive and symptomatic; corticosteroids are often used.^[5]

CASE

The patient was a 45-year-old female presented with a history of swelling over hands, feet and face in the past 1-2 weeks with generalized itching and abdominal pain along with yellowish discoloration of eyes. On examination, hyperpigmented patches were seen over trunk, back and limbs with exfoliation at some sites with pitting edema over hands and feet [Figure 1]. She has received phenytoin for 3 weeks post craniotomy due to subarachnoid hemorrhage. On routine hematological examination, eosinophil count and liver enzymes were raised with hyperbilirubinemia and hypoalbuminemia. On USG, mild GB wall edema and increased echogenicity of liver was there. Phenytoin was withdrawn and she was started on oral corticosteroids and emollients along with hepatology consultation, keeping in mind the diagnosis of DRESS.





Figure 1: Hyperpigmented patches over trunk with exfoliation and edema over hands and feet.

DISCUSSION

Drug rash with eosinophilia and systemic symptoms syndrome is an uncommon but serious hypersensitivity drug reaction most frequently associated with antiepileptics but it has also been reported after exposure to medications including lamotrigine, oxcarbazepine, vancomycin, sulfasalazine, doxycycline, allopurinol, linezolid, nitrofurantoin, atorvastatin, and esomeprazole.^[6] Clinically, fever precedes the development of a diffuse, morbilliform rash that can advance to an exfoliative dermatitis with abnormalities on complete blood count including eosinophilia (> 500/uL) or presence of atypical lymphocytes. Appropriate diagnostic testing should be performed to detect systemic involvement in the form of hepatitis, interstitial nephritis, myocarditis, pneumonitis. Early diagnosis and prompt treatment with corticosteroids is imperative.

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