Drug reaction with eosinophilia and systemic symptoms (DRESS) usually begins 2-6 weeks after exposure to certain drugs. DRESS has a complex natural course and very diverse clinical presentation. Anticonvulsant medications tend to be the most common triggers, however, other drugs including antibiotics, osteoporosis medications, and kinase inhibitors have been reported. Dermatologic findings include facial edema, exanthematous morbilliform eruption, pustules and sometimes mucosal involvement. Systemic involvement is thought to result from organ infiltration of eosinophils or lymphocytes. The organs typically involved include liver presenting as hepatic cytolsis to fulminant hepatitis; kidney, lung, and heart involvement. Cardiac involvement leading to myocarditis or pericarditis with elevation of cardiac enzymes can be fatal.

Acute generalized exanthematous pustulosis (AGEP) is an adverse drug reaction which typically begin within 48 hours of drug exposure but can be as long as 11 days post exposure. Most common associated medications include aminopenicillins, quinolones, hydroxychloroquine, sultamidonides, terbinafine, diltiazem, ketoconazole, and fluconazole; however, steroids, dietary supplements, and hypersensitivity to mercury, radiation, and spider bites have been reported as triggers for AGEP. Dermatologic features of AGEP include hundreds of nonfollicular sterile tiny pustules on an erythematous base. It favors intertriginous region and often begins on the trunk and it can be pruritic.

There has been randomized controlled studies looking into management of DRESS and AGEP. Systemic corticosteroids have been used for the management of DRESS but there is no standardized assessment of outcomes. Retrospective studies have shown the use of potent topical corticosteroids to be helpful in mild to moderate DRESS with less side effects that systemic corticosteroids. Prompt withdrawal of the offending drug for AGEP may be adequate with topical corticosteroids as adjunctive therapy.

Severe cutaneous adverse drug reactions (SCARs) in hospitalized patients carry increase morbidity, mortality and health-care cost. SJS/TEN are considered the most severe types of SCARs; however, DRESS syndrome carries up to 20% mortality. Patients with DRESS syndrome can have multiple organ involvement including cardiac involvement which can be fatal. Additionally, patients with DRESS syndrome carry a higher risk of autoimmune thyroiditis.

Here we presented a case of DRESS syndrome associated with use of phenytoin. Our case was interesting because this case also showed AGEP features including multiple tiny non-follicular pustules on an erythematous base involving the trunk and face. This case shows that SCARs have overlapping features and therefore, practitioners must be aware of such features as to avoid delay in diagnosis and treatment. DRESS syndrome carries a much higher mortality than AGEP and there is increased risk of autoimmune thyroiditis and therefore close follow up is required.

References