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A CASE REPORT OF DRESS (DRUG REACTION WITH ESINOPHILIA AND SYSTEMIC SYMPTOMS) SYNDROME

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Abstract :

ABSTRACTDress syndrome is characterized by drug reaction with eosinophilia and systemic symptoms. It was described by Bocquet on 1996.Here,our patient presented with fever,rash,lymphadenopathy,eosinophilia,renal and lung involvement following treatment for Acne vulgaris with Dapsone.

Keyword :KEYWORDS Dress syndrome, Interstitial nephritis, Interstitial pneumonitis.

INTRODUCTION

It is a idiosyncratic reaction to drug characterized by fever,rash,lymphadenopathy, eosinophilia, thrombocytopenia, atypical lymphocytocis,inflammation of internal organs. Synonyms-DIHS(Drug Induced Hypersensitivity Syndrome), DIDMOHS (Drug Induced Delayed Multiorgan Hypersensitivity Syndrome), Drug Induced Pseudolymphoma.It carries 10% mortality rate. The causative drugs include antiepileptic drugs like phenytoin , lamotrigine, carbamazepine, sulfonamides, allopurinol. Association with HHV-6 also reported.

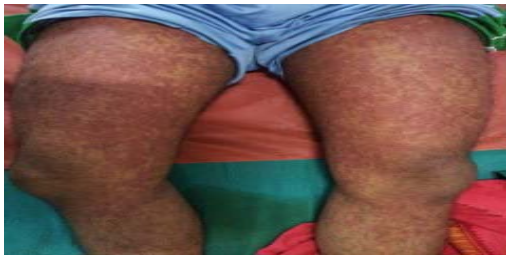
It is diagnosed by 2diagnostic criteria.It should satisfy **3/4** in Regiscar criteria and seven or first 5 in Japanese Consensus Group Criteria.

RegiSCAR Criteria	Japanese Consensus Group Criteria
Hospitalisation	Maculopapular rash >3 weeks after drug
Suspected to drug related	Prolonged symptoms >2 weeks after discontinuation of drug
Acute rash	Fever>38 degree Celsius
Fever>38 degree Celsius	LFT(ALT >100 unit/ltr)
Lymphadenopathy 2 sites	WBC Abnormalities
Atleast 1 internal organ involvement	Leukocytosis
Blood abnormalities(Increased WBC,Increased eosinophils,decreased platelets)	Atypical lymphocytosis >5%
	Lymphadenopathy
	HHV-6 reactivation

CASE REPORT:

Our patient Mr.Jayakumar 16 yr old boy studying 12th std was admitted with Chief complaints of fever,rash for 3 days duration.

MACULO PAPULAR RASH WITH PUSTULES



PAST HISTORY :

He underwent treatment for Acne vulgaris 3 weeks before the admission. He was prescribed Dapsone and Minocycline for acne.

EXAMINATION :

Patient was febrile, diffuse maculopapular rash with pustules over trunks, face and limbs, pharyngitis, cervical, axillary, submandibular lymphadenopathy. Liver and spleen are palpable. Cardiovascular,respiratory,opthal examination initially normal at present. On investigation leukocytosis, eosinophilia, atypical lymphocytosis. Initially renal and liver function was normal.Provisional diagnosis of dapsone fever was made.

COURSE OF ILLNESS:

On fourth day of admission patient developed oliguria, facial puffiness, pedal edema, cough with expectoration and difficulty in breathing.

Urine routine examination shows 1+ proteinuria,8-10 pus cells,2-3 RBC.

USG shows increased corticol echogenicity, mild splenomegaly.

His TC-10,800 cells/cu.mm. DC-P 73/L 20/E 6.

Serum bilirubin 0.7 mg. Liver enzymes and total protein normal.

Serum phosphorus 6.7.

HBsAg,HCV,HIV-1&2-Non reactive.

Malarial parasite, Lepto IgG, IgM negative.

EBV IgM,EBV nuclear Ag negative.EBV CA IgG,EBV EA IgG positive.

Absolute eosinophil count is 420 cells.

His CT chest shows acute interstitial pneumonitis.

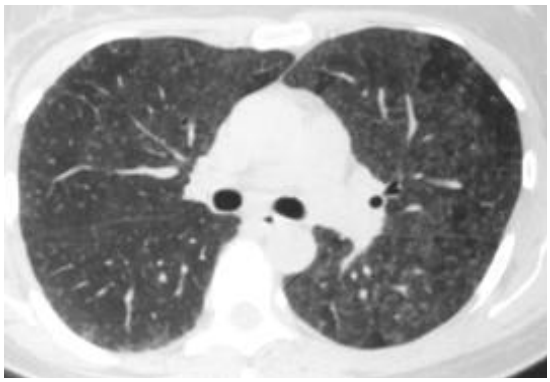
His CT KUB shows B/L enlarged kidneys.

Antinuclear antibody negative.

Renal Function test:

Date	18/3	21/3	¼	17/4	10/6	19/6
Urea	18	130	86	45	46	18
Creatine	9.0	8.4	5.2	2.1	2.2	1.5
Na+	128	142	136	142	139	135
K+	4.5	5.7	5.0	4.5	3.5	3.5

After treatment CT Chest



Patient was initiated on hemodialysis on 19/3/12 and started on oral prednisolone 1mg/kg body weight. His renal parameters started to decline over a period of two weeks and symptomatically improved. He was continued steroids for 2 weeks at the same dosage and tapered ,renal biopsy was taken. At present he is on tablet Prednisolone 10mg OD.

Renal biopsy shows Inflammatory cell infiltrate consists of lymphocytes,plasma cells and few eosinophils. Interstitial edema noted, arteriolar hyalinosis present. Dense and diffuse inflammatory cell infiltrate seen throughout interstitium. All stains are negative. Few lymphocytes invade the tubules.The renal biopsy was suggestive of interstitial nephritis.

Discussion:

The criteria for DRESS syndrome were fulfilled. He presented with classical symptoms of fever, rash,l ymphadenopathy and two internal organ involvement in kidney presented as acute tubulo interstitial nephritis, in lung presented as acute interstitial pneumonitis. The causative agent for this reaction in this patient is probably Dapsone. The aromatic amine portion of sulfonamide is critical for development of this reaction.The mainstay of treatment is withholding the offending drug, corticosteroid for 4 weeks. If not responsive cyclophosphamide and IV Immunoglobulin also can be tried. Usually the return of renal fuction to the baseline will take a year.

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