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A CASE REPORT ON DRESS SYNDROME

Pharma

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ABSTRACT

Drug rash with eosinophilia and systemic symptoms (DRESS) is a severe drug-induced hypersensitivity reaction that is difficult to diagnose due to the asymptomatic onset and non-specific nature of symptoms.(1) Here is the case report of a 49 years old lady who had taken indigenous medicine for the treatment of multiple joint pain and later took cephalosporins from a local hospital after which she developed rashes over her face and body accompanied by abdominal pain and fever.

KEYWORDS

DRESS syndrome Cephalosporins Indigenous medicine Eosinophilia

INTRODUCTION

Drug reaction with eosinophilia and systemic symptoms (DRESS) syndrome is a group of symptoms that occur as a result of taking certain medications.[2]The aetiology of DRESS syndrome is known to involve a number of antipsychotics, antibiotics, and sulfa-containing medications.[3,4]

It is followed by a variety of clinical manifestations, usually fever, rash, lymphadenopathy, eosinophilia, and a wide range of mild-to-severe systemic presentations.[5]DRESS manifests clinically as a prodrome of fever and flu-like symptoms for many days, followed by the appearance of a diffuse morbilliform eruption, typically involving the face.. Systemic manifestations include lymphadenopathy, fever, leukocytosis, eosinophilia, or atypical lymphocytosis, as well as hepatitis, nephritis, pneumonitis, myositis, and gastroenteritis.[6]

Case Report

A 49 year old female patient presented with complaints of abdominal discomfort, fever, and rashes over face and body for 5 days. She was on indigenous medication for multiple joint pain before admission, following which she developed severe abdominal discomfort and a burning sensation. She visited a local hospital for the same and she was also given PPI (Proton pump Inhibitors) and antiemetics but there was no relief of symptoms.

She was also given cephalosporins for 4 days given pyuria. Later she developed swelling and rash over her face and hands. Physical examination revealed a mild fever of 102.3°F, a fine erythematous rash on the upper and lower extremities, and facial puffiness. Her routine investigations were found to be abnormal. No infection with viruses including hepatitis A, B, and C viruses was confirmed. USG (UltraSonography) revealed hepatomegaly with an edematous gallbladder. Data of laboratory findings are summarized in Table:1

Table:1

TEST	Day1	Day2	Day3	Day 4	Day5	Day8
EOSINOPHILS	8%		9%		11%	1%
LYMPH	17%		36%		22%	55%
POLY	69%		51%		60%	38%
MONOCYTE	6%		4%		4%	6%
TLC	7060/µL		11300/µL		13100/µL	11700/µL
RBC	3.86 million				3.95million	
PCV	33.4%				33.3%	25.7
ESR		52 mm/hr				
T.Bilirubin	4.39mg/dl	4.38mg/dl	5.83mg/dl		6.84mg/dl	3.34mg/dl
D.Bilirubin	3.58mg/dl	3.6mg/dl	4.55mg/dl		4.89mg/dl	
I.Bilirubin	0.81mg/dl	0.78mg/dl	1.28mg/dl		1.95mg/dl	
ALT	210U/L	165U/L	144U/L		70U/L	
Alkaline Phosphatase	411U/L	411U/L	431U/L		301U/L	343U/L
AST	39U/L	49U/L	39U/L		27U/L	

She was diagnosed with a case of DRESS syndrome in view of her rash, fever, transaminitis eosinophilia, and jaundice. On day 3 of admission, the leptospira test was found to be positive (15.8) hence she was initiated with Tab. doxycycline 100mg BD and other supportive measures for tropical fever management. Serial investigations showed a decreasing trend of inflammatory markers and transaminitis. She was Symptomatically better, her rashes had subsided and vitally stable, hence discharged.

DISCUSSION

DRESS syndrome is a severe type IV (delayed type) hypersensitivity reaction that can occur with any medications. However, the presence of systemic symptoms like inflammation of the heart, liver, kidneys, or other organs is the distinguishing feature of DRESS syndrome.[2]

The onset of the disease usually ranges from 2 to 6 weeks after the initiation of the therapy.[7] The non-specific character of the symptoms and the lengthy asymptomatic interval between taking the medication and the onset of symptoms frequently make diagnosis difficult. The most specific symptom of DRESS syndrome is eosinophilia.[1] Drugs most commonly associated with DRESS syndrome are anticonvulsants, antibiotics, and allopurinols.

In our patient, the key factor provoking the development of DRESS syndrome appeared to be indigenous medication and cephalosporins. Treatment consists of discontinuation of the drugs that cause the hypersensitivity reaction and implementation of systemic steroid therapy.

CONCLUSION

DRESS syndrome, a serious clinical condition characterized by a triad of fever, rash, and eosinophilia with systemic organ involvement, may be associated with indigenous medications and various antibiotics. Symptoms typically appear 2-3 weeks after exposure to the offending drug(s). It is critical to diagnose this syndrome early so that an identified medication can be discontinued and future re-exposure

avoided. Medical history and knowledge of potential drug reactions are critical in making the best clinical decision.

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