Japanese Journal of Gastroenterology and Hepatology

Case Report

ISSN 2435-1210|Volume 7

Dress Syndrome in a Patient on Sulfasalazine for Hemorrhagic Rectocolitis: A Case Report

Nkhaili A[1], Chakor FE[1], Semlali R[1], Aouroud M[1], Errami AA[1], Oubaha S[2], Samlani Z[1] and Krati K[1]

[1]Department of Gastroenterology, CHU Mohammed VI Marrakech, Morocco

[2]Laboratory of physiology, Faculty of medicine and pharmacy of Marrakech, Morocco

***Corresponding author:**

Asmaa Nkhaili,
Department of Gastroenterology, Mohammed VI university hospital center, Marrakech, Morocco,
E-mail: asmaa.nkhaili@gmail.com

Received: 18 Oct 2021
Accepted: 31 Oct 2021
Published: 25 Nov 2021
J Short Name: JJGH

Keywords:

Sulfasalazine; Dress syndrome; Hemorrhagic rectocolitis

Citation:

Nkhaili A, Dress Syndrome in a Patient on Sulfasalazine for Hemorrhagic Rectocolitis: A Case Report. Japanese J Gstro Hepato. 2021; V7(10): 1-3

1. Abstract

Sulfasalazine is an immunomodulatory drug used in the treatment of various dysimmune diseases including the intestinal bowel disease. Sulfasalazine is known to cause sulfasalazine-induced hypersensitivity syndrome (SIHS), also known as drug reaction with eosinophilia and systemic symptoms (DRESS). The dress syndrome is an acute and rare drug eruption, the diagnosis must be evoked in front of a febrile rash and systemic signs following drug intake, especially the delay between the taking of the medication and the appearance of the symptoms, which varies between 3 and 8 weeks. The seriousness of this pathology makes early diagnosis essential for good management. We report a case of a patient followed for hemorrhagic rectocolitis, he developed dress syndrome 4 weeks after taking sulfasalazine

2. Introduction

Dress syndrome or drug rash with eosinophilia and symptoms systemic, it is an acute and rare drug eruption, potentially fatal with an estimated mortality rate of 10%. [1] The DRESS syndrome is defined by the association of several elements: fever above 38.5 ° C, rashes, cutaneous haematological abnormalities of eosinophilia or atypical lymphocytes, enlarged lymph nodes at least 2 cm in diameter and a variable combination of organ damage which can be life-threatening [2]. We report a case of DRESS syndrome in a patient on salazopyrine for hemorrhagic rectocolitis.

3. Patient and Observation

Patient A.J aged 49, with no particular pathological history other than surgery for an umbilical hernia 4 years ago, followed since May 2021 with hemorrhagic rectocolitis, localized to the left sided colic, revealed bloody diarrhoea with pus or mucus at a rate of 3 at 4 W/day associated with rectal syndrome and atypical peri-umbilical pain, the patient was treated with salazopyrine 4 g / day. there was a marked reduction or complete resolution of diarrhoea, four weeks after the introduction of salazopyrine, the patient presented flu-like symptoms and skin rash with an erythematous maculopapular eruption (Figure 1), a 39^{0}C fever and a deterioration in general health , the decision was to stop salazopyrin emergency a boratory findings were as follows: hyperleukocytosis at 15450 elt/mm3, with hyperlymphocytosis at 9054 elt/mm3, eosinophils at 726/mm3, monocytosis at 1700,hepatic cytolysis with ALAT at 434 IU / l (9.8N), ASAT at 132IU / l (2.6N), GGT at 395 (7.1N), PAL at 156 (1.3N), the normal PT assay, 24 h proteinuria was 0.24 g / 24 h. The virological assessment, viral serology was performed after symptom resolution, found CMV igM negative and IgG serology negative, EBV igM and IgG positive. The serologies for HBV, HCV, and HIV were negative. Herpes simplex virus 6 and 7 serologies were not performed. The patient was put under treatment with topical corticosteroids, oral corticosteroid therapy, 1mg/kg/day, antihistamines, with a concomitant marked improvement in hepatic cytolysis and the disappearance of skin rashes, 17 days after stopping the responsible treatment, regarding the hemorrhagic rectocolitis, the patient remained in remission and the patient was put on immunosuppressive therapy.

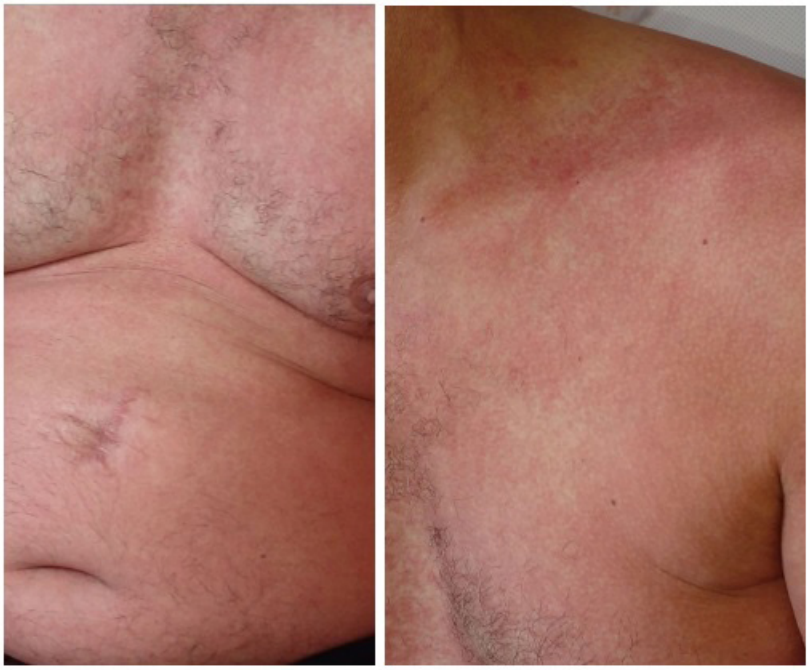

Figure 1: Maculopapular erythematous rash of the trunk.

4. Discussion

The diagnosis of Dress syndrome is based on the presence of clinical and biological criteria allowing its identification [3]. There are several classifications for the diagnostic criteria of dress syndrome, such as the diagnostic criteria of the Japanese group of dress syndrome [4] (Table 1), the most important criteria which allows to suspect a dress syndrome, it is especially the time of appearance of the symptoms and the introduction of the drug at risk which varies from 3 weeks to 2 months, a skin rash, haematological abnormalities (eosinophilia, atypical lymphocytosis) and visceral organ damage (hepatic, pulmonary, renal) [5]. Our patient has five criteria out of seven, for viral reactivation, viral serologies were performed at a distance from the symptoms. Concomitant viral reactivation were not excluded in our case.

Table 1: Diagnostic criteria for the Japanese dress syndrome group

1.	Maculopapular rash developing > 3 weeks after starting with a limited number of drugs
2.	Prolonged clinical symptoms after discontinuation of the causative drug
3.	Fever > 38^0C
4.	Liver abnormalities (ALT > 100U/L)
5.	Leukocyte abnormalities (at least one present) a. Leucocytosis (> $11x10^9$/L) b. Atypical lymphocytosis (> 5%) c. Eosinophilia (> 1.5x10 /L)
6. Lmphadenopathy	
7. HHV-6 reactivation	

The onset is usually brutal. It is a maculo-papular rash especially on the trunk, and other lesions have been observed including vesicles, pustules, or purpura. Facial edema is sometimes encountered; the mucous membranes are only affected in about 10% of cases. [1]. Fever, and deterioration of the general condition are generally associated, lymphadenopathies are sometimes present. The outcome is most often favorable on condition that the drug at risk is quickly discontinued, with a mortality rate of 10% [6].

Virological examinations are important to carry out the demonstration of reactivation of viruses of the herpes group: Human Herpesvirus 6 (HHV-6), Cytomegalovirus (CMV), Epstein-Barr Virus (EBV), Human Herpesvirus 7 (HHV- 7) [7, 8]. The immune response triggered by these viral reactivations makes it possible to explain the clinical and biological manifestations of DRESS, in particular, the systemic attacks which make the syndrome so serious [9.10]. HHV-6 reactivation is now part of the criteria of diagnosis in Japan and its importance could be a prognostic criterion.

Sulfasalazine is a prodrug composed of 5-aminosalicylic acid (mesalamine or mesalazine) and sulfapyridine linked by an azo bond sulfasalazine or its metabolites such as sulfapyridine and 5-aminosalicylic acid are responsible for its anti-inflammatory effects, it's one of the main DMARDs of inflammatory colitis in our context. [11]. Several studies have described the incrimination of sulfonylurea in the occurrence of dress syndrome [12, 13].

Regarding the management of dress syndrome, first of all, the offending drug must be stopped. Treatment depends on the severity of the systemic involvement. This requires carrying out an exhaustive assessment of the various organs concerned (lung, kidney, liver) [14], so treatment with topical corticosteroids alone can be started in the absence of damage to visceral organs [14, 15] Otherwise, systemic corticosteroid therapy (1-1.5 mg / kg / day) is the treatment of choice [14, 16]. In the event of severe disease which may be life-threatening or if there is no response to corticosteroids, treatment with intravenous immunoglobulins (IVIG) in combination with corticosteroid

therapy may be discussed [14, 16, 17].

5. Conclusion

Sulfasalazine has been widely used for the treatment of inflammatory bowel disease, so it can cause dress syndrome which is a rare and serious condition. Its diagnosis is delayed due to a long interval between the introduction of the offending drug and the onset of symptoms. The diagnosis must be evoked in front of a febrile rash and systemic signs following drug intake. The precocity of the diagnosis is fundamental for the definitive discontinuation of the suspicious drug. The treatment is not well codified but is currently based on general corticosteroid therapy.

References

1. Warnock JK1, Morris DW. Adverse cutaneous reactions to antidepressants. Am J Clin Dermatol. 2002; 3: 329-39.
2. Cacoub P, Musette P, Descamps V. The DRESS syndrome: a literature review. Am J Med. 2011; 124: 588-597.
3. Begon E, Roujeau JC. Drug hypersensitivity syndrome or DRESS. Ann Dermatol Venereol. 2004; 131: 293-7.
4. Shiohara T, Inaoka M, Kano Y. Drug-induced hypersensitivity syndrome (DIHS): A reaction induced by a complex interplay between herpesviruses and antiviral and antidrug immune responses. Allergol Int. 2006; 55: 1-8.
5. Bourguignon C. Piérard-Franchimont, P. Paquet, Ge Piérard. Dress Syndrome to sulfasalzine. Rev Med Liege. 2006; 61: 9: 643-648.
6. Bocquet H, Bagot M, Roujeau JC. Drug-induced pseudolymphoma and drug hypersensitivity syndrome (Drug Rash with Eosinophilia and Systemic Symptoms: DRESS). Sem Cutan Med Surg. 1996; 1: 250-251.
7. Shiohara T, Inaoka M, Kano Y. Drug-induced hypersensitivity syndrome (DIHS): A reaction induced by a complex interplay among herpesviruses and antiviral and antidrug immune responses. Allergol Int. 2006; 55: 1-8.
8. Eshki M, Allanore L, Musette P, Milpied B, Grange A, Guillaume JC et al. Twelve-year analysis of severe cases of drug reaction with eosinophilia and systemic symptoms: a cause of unpredictable multiorgan failure. Arch Dermatol. 2009; 145: 67-72.
9. Picard D, Janela B, Descamps V, D'Incan M, Rogez S, Minus Teisserenc H et al. T-cell repertoire, phenotype and functionality in drug hypersensitivity syndrome. 2007 ESDR, Zurich. J Invest Dermatol. 2007; 127: S21.
10. Shiohara T, Kano Y. A complex interaction between drug allergy and viral infection. Clin Rev Allergie Immunol. 2007; 33: 124-33.
11. Jaehwa Choi; Ardy Fenando . Sulfasalazine 2021, StatPearls Publishing LLC.
12. Michel F, Navellou JC, Ferraud D, Toussirot E, Wendling D. DRESS syndrome in a patient on sulfasalazine for rheumatoid arthritis. Joint Bone Spine. 2005; 72: 82-5.
13. Chebbi W, Souissi J, Chelli J, Larbi F, Baha Zantourand Mohamed Habib S far, Pan Africa Med J. 2014; 19: 166. Dress syndrome about 3cases.
14. Descamps V, Ranger-Rogez S. DRESS syndrome. Joint Bone Spine. 2014; 81: 15-21.
15. Funk-Brentano E, Duong TA, Bouvresse S. Therapeutic management of DRESS: A retrospective study of 38 cases. J Am Acad Dermatol. 2015; 72: 246-52.
16. Husain Z, Reddy BY, Schwartz RA. DRESS syndrome: Part II. Management and therapeutics. J Am Acad Dermatol. 2013; 68: 709 e1-9.
17. Joly P, Janela B, Tetart F. Poor benefit / risk balance of intravenous immunoglobulins in DRESS. Arch Dermatol. 2012; 148: 543-4.