A DRESS Case which Described in Patient with Ulcerative Colitis

Gamze Gursoy[1]*, Caglayan Merve Ayaz[1], Oguz Kodaz[1], Ebru Celebioglu[2], Ali Fuat Kalyoncu[2], Serhat Unal[1]

[1]Department of Infectious Diseases and Clinical Microbiology, Hacettepe University, Ankara, Turkey;
[2]Department of Immunology and Allergy, Hacettepe University, Ankara, Turkey

ABSTRACT

Ulcerative colitis is a chronic inflammatory bowel disease. Coexistence with autoimmune and inflammatory diseases is common. Incidence is 5.3-63.6/100,000 in Asian race Drug Rash with Eosinophilia and Systemic Symptoms (DRESS) was first described in 1936 during the use of anticonvulsant drugs. Antibiotics causing DRESS syndrome are; vancomycin (39%), β-lactams (23%), fluoroquinolones (4%), tetracycline's (4%), and sulfonamides (3%) respectively .

Keywords: Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS), Ulserative Colitis, Rash

INTRODUCTION

Ulcerative colitis (UC) belongs to a group of conditions known as inflammatory bowel diseases (IBD). UC is a chronic inflammatory condition of the large intestine (colon and rectum) that can occur at any age. The symptoms can include abdominal pain, bowel urgency, diarrhea, and blood in the stool. The inflammation begins in the rectum and extends up the colon in a continuous manner.

CASE DISCRIPTION

Patient is 59 years old male, japanese and working as a diplomat. He has ulcerative colitis (diagnosed 40 years ago, totally collectomized), idiopathic lymphopenia (15 years), benign prostatic hyperplasia (10 years, currently using limaprost and tadalafil). In March 2018, patient had a rotator cuff tear on his right shoulder after minor trauma. He was first operated in March 2018 and then secondly in October 2018 (primary repair). When the rupture recurred, patient received a graft from his thigh fascia lata region in August 2019 and underwent rotator cuff reconstruction surgery. Fourteen days aftersurgery; pain, swelling and redness of the right shoulder area started. Thereupon, patient underwent arthrosynthesis three times and microorganisms did not grow in synovial fluid cultures. Patient received a total of 5600 mg intravenous ciprofloxacin, 12.600 mg intravenous teicoplanin for 14 days and 2800 mg oral cefixime treatment in out-patient follow-up (Figure 1).

Figure 1: Maculopapuler rash.

Liver and spleen size were normal in abdominal examination. Non-bloody and mucus-free diarrhea which has been lasting almost for 10 days, detected in symptom guestioning. Complete blood count was normal except lymphopenia and anemia; and no peripheral eosinophilia was shown.

Bilirubin levels, thyroid function tests were normal and there was no abnormality in urinalysis. Viral serology and rheumatologic markers of patient were negative. Sexually transmitted diseases also did not deteched. No bacterial growth was observed in blood and urine culture of the patient. Chest radiography and tomography were performed for evaluating hypoxia (Figure 2 and 3) [1-5].

Figure 2: Reticular involvement and decreased aeration in both lung parenchyma suggesting interstitial involvement.

Figure 3: Bilateral pleural effusion and more pronounced interstitial involvement in the right lung.

DRESS was considered as the diagnosis and RegiSCAR score calculated as 4 (probable DRESS) [6]. All medications used by patient were discontinued and 1 mg/kg (total 60 mg) intravenous methylprednisolone was started immediately. At the 24th hours of treatment, patient's oxygen demand decreased to 2 lt/min, this general condition improved and his fever decreased. On the 4th day of treatment, patient had no longer needed oxygen thearpy, rashes disappeared and transaminase levels were normal at the end of the second week of treatment. Steroid treatment was discontinued in accordance with the reduction scheme.

DISCUSSION AND CONCLUSION

When patient's initial complaintments and laboratory tests are evaluated, we saw that all systems involved. Symptoms (skin rash, hypoxia and elevated transaminases) emerging after starting of new drug suggested diagnosis of DRESS. Lack of alternative diagnosis to explain present picture and dramatic response to steroid treatment supported our diagnosis. In similar clinical presentations, diagnosis of drug reaction should be made by clinicians before multiple systemic involvements develop. Peripheral eosinophilia may not always be seen [7].

Bronchoalveolar lavage can be performed to support the diagnosis and DRESS diagnosis can be supported by eosinophilic pneumoniae [8]. Discontinuation of responsible drug and treatment with systemic steroids is recommended [9].

ETHICAL CONSIDERATIONS

We confirm full adherence to ethical issues in the course of case presentation and publication.

CONFLICTS OF INTEREST

Authors confirm no conflict of interest. All authors have contributed to the study and have read this latest version of the manuscript. This work has not been previously published in any journal and has not submitted for publication elsewhere.

REFERENCES

1. Gajendran M, Loganathan P, Jimenez G, Catinella AP, Ng N, Umapathy C, et al. A comprehensive review and update on ulcerative colitis. Dis Mon. 2019; 65(12):100851.

2. Halling ML, Kjeldsen J, Knudsen T, Nielsen J, Hansen LK. Patients with inflammatory bowel disease have increased risk of autoimmune and inflammatory diseases. World J Gastroenterol. 2017; 23(33): 6137-6146.

3. Niriella MA, De Silva AP, Dayaratne AH, Ariyasinghe MH, Navarathne MM, Peiris RS, et al. Prevalence of inflammatory bowel disease in two districts of Sri Lanka: a hospital based survey. BMC Gastroenterol. 2010; 10(1):1-7.

4. Saltzstein SL, Ackerman LV. Lymphadenopathy induced by anticonvulsant drugs and mimicking clinically and pathologically malignant lymphomas. Cancer. 1959; 12(1):164-182.

5. Pirmohamed M. HLA-and immune-mediated adverse drug reactions: Another hit with vancomycin. J Allergy Clin Immunol. 2019; 144(1): 44-45.

6. Roujeau JC, Allanore L, Liss Y, Mockenhaupt M. Severe cutaneous adverse reactions to drugs (SCAR): definitions, diagnostic criteria, genetic predisposition. Dermatol Sin. 2009; 27(2):203-209.

7. Musette P, Janela B. New insights into drug reaction with eosinophilia and systemic symptoms pathophysiology. Front Med. 2017; 4:179.

8. Shibuya R, Tanizaki H, Nakajima S, Koyanagi I, Kataoka TR, Miyachi Y, et al. DIHS/DRESS with remarkable eosinophilic pneumonia caused by zonisamide. Acta Derm Venereol. 2015; 95(2):229-230.

9. De A, Rajagopalan M, Sarda A, Das S, Biswas P. Drug reaction with eosinophilia and systemic symptoms: an update and review of recent literature. Indian J Dermatol. 2018; 63(1):30.