



Disseminated Intravascular Coagulation: As Presenting Feature in Patients with Systemic Lupus Erythematosus - Two Case Reports

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ABSTRACT

There are different types of initial manifestation of systemic lupus erythematosus (SLE) like rash, oral ulcers, joint pain, anaemia and repeated abortions^{1,2,3} but presenting with fever altered sensorium^{4,5}, hepatopathy, hypotension and bleeding disorder^{9,10} can be rare initial clinical presentations in both new and diagnosed patients of SLE. We present two patients of SLE with this rare manifestation.

Key Words: Systemic lupus erythematosus (SLE), Disseminated intravascular coagulation (DIC), multiorgan dysfunction syndrome (MODS).

INTRODUCTION

We report two patients admitted with hypotension and altered sensorium, petechiae all over body with bleeding from gum and vagina. Both the patients were initially treated in the line of sepsis with DIC. Disseminated intravascular coagulation is commonly associated with sepsis, cancer, obstetric complications, shock, snake bite and burn injuries¹¹. But the condition did not improve and as the first patient was diagnosed as SLE 15 days back and no other cause for DIC besides SLE could be established, she was treated with injection methyprednisolone, which rapidly improved the condition. Similar event happened in the second patient and improved only after receiving methyprednisolone.

CASE NO-1

A young lady of 19 years was admitted with altered sensorium, gum bleeding, vaginal bleeding

and petechiae all over body. Clinical examination revealed hypotension (SBP90mmHg), altered sensorium. No abnormalities were found in the cardiovascular, respiratory or abdominal systems. She had oral ulcers and SLE was diagnosed 15 days back.

Her labs revealed Hemoglobin of 5.2g/dl, WBC count of $3.8 \times 10^3/\mu\text{L}$ and platelet count of $70 \times 10^3/\mu\text{L}$. ESR was 40mm in first hour. Serum creatinine was 3 mg/dL, liver function test was total bilirubin-1.5, AST-350, ALT-300, ALP-245, low fibrinogen and increased in fibrin degradation product (FDPs-312/ μL) level, CSF examination was normal. X-ray chest, CT scan brain were normal. She was treated with dopamine, noradrenaline, antibiotics, transfusion of whole blood, platelet rich plasma and FFP (fresh frozen plasma) on the suspicion of pancytopenia, sepsis with DIC. Her clinical conditions did not improve with treatment. In absence of other cause for DIC

she was treated for SLE with injection methylprednisolone (1gm/d), which rapidly corrected the DIC as well as the other manifestations of SLE like hypotension, pancytopenia, renal failure and bleeding disorder.

CASE NO-2

A 35year old lady admitted with similar presentation of altered sensorium, gum and vaginal bleeding, petechae all over body and fever. Clinical examination revealed fever (102^oF), hypotension(S.B.P 80mmHg), altered sensorium, planters were non responsive with no neck rigidity. No abnormalities were found in the cardiovascular, respiratory or abdominal systems. She had also oral ulcers and alopecia for last one year. No medical attention was sought for these complaints.

Her labs revealed Hemoglobin of 6.4g/dl, WBC count of 3.2x10³/uL and platelet count of 60x10³/uL. ESR was 30mm in first hour. On admission serum creatinine was 3.8 mg/dL, liver function test was total bilirubin-1.3,AST-595,ALT-336,ALP-299, test for malaria parasite was negative both slide and ICT,CSF examination was normal. X-ray chest, CT scan brain were normal but the fibrin degradation product (FDPs-318/ uL) level was raised. Initially she was treated with dopamine, noradrenaline, piperacilline-tazobactam, transfusion of whole blood, platelet rich plasma and FFP (fresh frozen plasma) on the suspicion of sepsis with DIC. But her clinical condition did not improve and developed seizure on 5th day of admission, so autoimmune profile was planned due to presence of oral ulcer and alopecia. Her antinuclear antibody came out to be strongly positive and homogenous (ANA 29.5). Anti dsDNA(9.2) was also markedly elevated, complement levels were suppressed. So injection methylprednisolone was started (1gm/d) on 5th day. Then patient's condition improved and patient became conscious after 2days . In addition to above mentioned treatment she was also given hydroxy-choloroquin 200mg/day and discharged with follow-up after one month. On follow up she

was normal clinically and still on regular follow up.

DISCUSSION

We report two young women with SLE presented with pancytopenia, bleeding disorder, hypotension, renal failure, liver dysfunction and CNS manifestation which did not respond to standard treatment for common diseases like sepsis with DIC but improved with injection methylprednisolone(1gm/d). The main clinical categories of DIC are commonly associated with sepsis mostly with gram negative septicemia, cancer like AML and pancreatic carcinoma, obstetric complications, snake bite and burn injuries¹¹. In a retrospective study of a series of 129 SLE patients, eight of whom developed DIC during the course of this disease, and common risk parameters, present at the time of first medical examination, were leukopenia infection and male sex. ¹² Although infectious, malignancy and obstetric complications remain the most common cause of DIC; SLE should one of the important differential diagnoses in certain clinical settings.

CONCLUSION

Since acute disseminated intravascular coagulation (DIC) often contributes to a fatal outcome in patients with systemic lupus erythematosus (SLE), prediction of its development is important to prevent the occurrence of such an event in absence of other causes of DIC.¹²

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