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Indian J.Sci.Res. 14 (1): 107-109, 2023 Case Report

DEEP VEIN THROMBOSIS AND THROMBOCYTOPENIA ASINITIAL PRESENTING MANIFESTATION OF SYSTEMIC LUPUS ERYTHEMATOSUS: A CASE REPORT

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ABSTRACT

Systemic Lupus Erythematosus (SLE), is sometimes complicated by the rare fatal syndrome, deep vein thrombosis, but the occurrence of deep vein thrombosis as the initial manifestation of SLE is very rare. Here we report a case with thrombocytopenia and deep vein thrombosis as the presenting symptoms of SLE.

KEYWORDS: Systemic Lupus Erythematosus (SLE), Syndrome

SLE patients are at a higher risk for thrombotic events such as deep vein thrombosis (DVT). It occurs in up to 26% of SLE patients. The occurrence of DVT as the presenting symptom of SLE is also very rare. Here we describe a case of such presentation. The most common autoimmune disease with DVT is SLE.

Case Report

A 27year old female was referred to our hospital (BPS govt medical college for women Khanpur kalan, Sonepat, Haryana) from civil hospital Sonepat in view of persistent thrombocytopenia from 1 month and severe vaginal bleeding from 1 week with complaint of pain and swelling in right lower limb below knee. Patient was having history of pain and swelling in right lower limb below knee 6 month back. At that time patient was diagnosed as deep vein thrombosis on basis of USG findings in civil hospital and was treated with low molecular weight heparin (subcutaneous) for 1 week and warfarin for 1 month. After that patient's symptoms resolved and patient stopped taking medications. Similar complaint started one month back. Patient was taken to civil hospital and there she was diagnosed as deep vein thrombosis and thrombocytopenia (platelet 20,000) and patient was started on warfarin and low molecular weight heparin but patient started having heavy vaginal bleeding. After that patient was referred to our center.

On admission patient was having BP- 136/84, pulse rate 88, spo2 100% on room air, temperature 37.4 degree Celsius. On examination patient was having mid pallor, noicterus, no clubbing, no cyanosis, no koilonychia, no lymphadenopathy. Patient washaving pain and swelling in rt lower limb below knee. On palpation tenderness waspresent at site of swelling, temperature was more than other sites of body.

Patient does not have any history of long-term illness. Patient was having complaint of pain in joints (more than 4 large joints and more than 6 small joints) from 2 months. Patient was having history of 2 abortions. 1st was 1 year back which was in1st trimester and 2nd was 6 months back which was in 2nd trimester. Patient was not having any history of drug allergy. Patient was vegetarian by diet, non-alcoholic, non-smoker.On systemic examination of respiratory, cardiac, GIT, CNS systems, no abnormalitywas detected.

On 1st day of admission patient was transfused 4-unit platelets to stop vaginal bleeding caused by thrombocytopenia. All routine investigations and other necessary samples were sent.

Patient Hb-8.5, Platlet-15,000, BT/CT-WNL, PT/INR-WNL, TLC-WNL, LFT/RFT-WNL, Serum electrolyte-WNL, Viral marker-WNL, Urine routine - WNL.

On USG colour doppler of right lower limb- Right Saphenofemoral vein (SFV) shows partial thrombus in its proximal segment causing nearby 65% luminal narrowing and partially compressible. Distal to this, right SFV till its digital segment, is completely thrombosed with presence of echogenic thrombus seen within the lumen, distendingthe superficial femoral vein in its entire extent. Thrombus seen extending into popliteal vein, anterior tibial vein as well as the proximal soleal vein, which is also distended and non-compressible with no doppler flow at the time of scan. Great Saphenous vein also completely thrombosed, shows echogenic thrombus in its lumen, distending it and showing minimal doppler flow is minimally compressible. Thrombus is seen extending in its entire length. Thrombus is also seen involving Short Saphenous vein which is partially thrombosed, partially compressible with reduced doppler

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flow within it.

On 2nd day of admission patient was still having persistent vaginal bleeding. Patient's complete hemogram was sent. In which patient was having platelet count 30,000 andhemoglobin level-8.2. Patient was again transfused 4 - unit platelet and 1-unit PCV.As patient was having history of 2 recurrent abortion and DVT, we suspected APLA syndrome. Patients sample for antibodies for APLA were sent. Patient ANA level and complete hemogram sample were also sent after transfusion.

On day 3 patient was not having any vaginal bleeding. In complete hemogram reportplatelet count was 80,000 and hemoglobin level was 10.0. Patient was started on Subcutaneous low molecular weight heparin and oral warfarin.

Investigations	Result	Normal range
1. Serum vitamin B-12 level	208 pg/ml	187-883
2. Serum Folic acid level	10.5 ng/ml	>5.38- normal
3. Serum ferritin level	152 mcg/l	24-336 mcg/l
4. AntinuclearAntibody	78.32	<20.0-normal
5. Cardiolipinantibody	IgG-280 IgM-22.2	<0.8- normal <0.8- normal
6. Lupus Anticoagulant	Detected	
7. Antiphospholipid Antibody	IgG-29.4IgM-5.8	<15.0- Negative <15.0- Negative

On day 4 of admission patient was symptomatically better. Swelling and pain started decreasing. Complete hemogram sample was sent on day 4. Further workup for SLE was done. Patient Hb-10.5, PLT-53,000, Anti ds DNA-386.82 IU/ml (0-200 IU/ml).

On basis of reports and symptoms patient was diagnosed as a case of SLE with APLA Syndrome with DVT. SLE diagnosis was made by using ACR criteria.

On 6th day of admission patient was having around 90 percent recovery from symptoms. Swelling and pain subsided. Patient was discharged in stable condition on day 7 with ongoing treatment.

DISCUSSION

Systemic lupus erythematosus (SLE) is a chronic autoimmune, multiorgan inflammatory disorder that primarily affects young women, but as many as 20% of SLE patients are ≥ 50 years. Affecting nearly every organ system in the body, SLE symptoms vary widely in severity, from mild to progressively more serious symptoms that can result in fatal complications (Chung *et al.*, 2014). It is well known that the cardiovascular disease (CVD) morbidity and mortality of patients with SLE is substantially increased as compared to the general population. There is limited dataon the contemporary risk of venous thromboembolism (VTE) in SLE. Like other autoimmune diseases, hypercoagulability and inflammation are general features of SLE, and both factors are responsible for inciting venous thrombosis. Systemic inflammation can modulate thrombotic responses by upregulating procoagulants, downregulating anticoagulants and suppressing fibrinolysis. Additionally, antiphospholipid antibodies, which are often seen in SLE, confer an increased risk of vascular events. VTE encompasses both pulmonary embolism (PE) and deep vein thrombosis (DVT), both of which are major health concerns that have an annual incidence of 1–2 cases per 1000 people in western populations. There is significant mortality associated with VTE events, up to 15% in the first 3 months afterdiagnosis. This makes VTE potentially as deadly an illness as acute myocardial infarction; survivors often experience serious and costly long-term complications from their illness, as well as potential side effects from anticoagulation treatment. Given that approximately 79% of patients who present with PE have evidence of DVT in their legs, PE and DVT are thought to represent the spectrum of one disease. Furthermore, because PE can be largely prevented by preventing DVT, studying these conditions together is sensible (Zubieta *et al.*, 2015). Systemic lupus erythematosus (SLE) is the most frequent autoimmune disease associated with APLA syndrome and also, the pathogenesis of these two clinical conditions seems to be intricate (Caraiola *et al.*, 2018). Thrombosis is recognized as one of the major causes of morbidity and mortality in SLE (Ekdahl *et al.*, 2004). A historyof thrombosis has been reported in 7.2% to 12% of patients with systemic lupus erythematosus (SLE). Further, the proportionate mortality from thrombosis in SLE has been found to be 26.7% (Somers *et al.*, 2002).

CONCLUSION

DVT can be initial presentation of SLE. It must be mentioned that, since DVT and thrombotic

thrombocytopenic purpura has multiple similarities with SLE in its clinical or paraclinical features, the diagnosis may be complicated or missed, but accurate and early diagnosis is very important due to the differences between their treatments and fatal course of untreated TTP and DVT. In addition, since thromboticevents have a great share in SLE-related mortalities, so keeping a close eye is imperative for lupus patients. It seems that further investigations are essential for determining the common mechanisms involved in the pathogenesis of simultaneous occurrence of these syndromes with each other.

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