



ANTIPHOSPHOLIPID ANTIBODY SYNDROME: A COMPREHENSIVE CASE & REPORT ANALYSIS

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ABSTRACT

A rare systemic autoimmune disease which is named as APLAS (Anti Phospholipid Antibody Syndrome) is mainly characterized by blood clots, recurrent miscarriage in pregnancy, thrombocytopenia. Almost 5 people out of 1lakh pregnant woman are affected in India. There are few antibodies which attack their own body protein mistakenly and causes thrombocytopenia, venous or arterial thromboembolism, miscarriage, livedo reticularis. A proper treatment can help the patient to reduce the symptoms. Anticoagulant therapy is used as the standard therapy. This article aimed is to know all about the disease profile and management of APLAS affected pregnant woman.

Keywords: APLAS, Cardiolipin antibody, pregnancy, heparin, aspirin

INTRODUCTION:

The antiphospholipid antibody syndrome is defined by thrombotic events and/or obstetric complications and the presence of antiphospholipid antibodies detected in patient plasma [1]. This autoimmune disease

is characterized by the presence of antiphospholipid antibodies in the blood which can lead to excessive clotting or hypercoagulability. The specific antiphospholipid antibody such as lupus

anticoagulant, anti-beta-2 glycoprotein 1, and anticardiolipin antibody can cause a variety of health issues including blood clots in veins and arteries, pregnancy complications like recurrent miscarriages and organ damage due to impaired blood flow. Some common symptoms and manifestations of APS include blood clots, recurrent miscarriages, livedo reticularis, thrombocytopenia, kidney damage, lung issues, and neurological abnormality. The prevalence rate of this condition is almost 12.5% (40-50 cases per 1 lakh persons).

APLAS is typically diagnosed through blood tests for antiphospholipid antibodies and clinical symptoms. "The mechanism of pregnancy loss and thrombosis in the antiphospholipid-antibody syndrome remains unclear" [2]. The inhibitory effect of antiphospholipid antibodies on proliferation of trophoblasts of the placenta has been proposed as the pathogenic mechanism in early pregnancy loss [3]. Treatment aims to reduce the blood clots and manage symptoms. Medications for treatment include blood thinning agents (like heparin, low molecular weight heparin) to prevent clot formation and management of associated condition. No significant difference is present in outcomes between therapeutic versus prophylactic doses of LMWH (low molecular weight heparin)

[4]. Aspirin in low dose is also helpful. Regular checkup & specialized care is needed.

CASE REPORT:

A 24 year old female patient came for follow up with complaints of weakness in her 7 month of pregnancy.

PAST HISTORY:

Patient has experienced 2 time of abortion; 1st abortion happened 3years ago when she was 3month pregnant and 2years ago she faced the same when she was in her 10 weeks of pregnancy. In the starting of this year she was gone through a complete check up and diagnosed with APLA syndrome (anticardiolipin antibody positive). After being pregnant, she was admitted in the hospital 4 months ago for check up and therapy has been started.

MEDICATION HISTORY:

From the last hospitalization below medication is continued Inj. Enoxaparin 0.4cc SC OD

PHYSICAL EXAMINATION:

General examination: the patient was guarded, cooperative and coherent. Head, Eyes, Ears, Nose, Throat, Mouth, Neck were found normal. CNS: conscious and oriented, no neurological deficits, CVS: S1, S2 (positive), no murmur has been noted. RS: BERL (positive) no signs of wheezing or crackles, GIT: soft, non-distended.

PATIENT DEMOGRAPHICS:

24 year old female patient is 7month pregnant diagnosed with APLA syndrome. Patient weight is 39.850Kg and her height is 152cm. Blood group is B+. No allergies have been noticed. Her pregnancy status is G3P0A2L0.

MENSTRUAL HISTORY:

Menarche is in 13 years of age. Past menstrual is regular (2-3 day cycle, 1-2 pad/day) LMP: 19/1/23

FAMILY HISTORY:

Not significant

SOCIAL HISTORY:

Diet: mixed, no addiction, housewife, adequate appetite, regular sleep

FINAL DIAGNOSIS: Antiphospholipid antibody syndrome

DISCUSSION:

The patient was having miscarriage as a principal symptom of the syndrome which is a serious condition. The specific antibody (cardiolipin antibody) reduces the level of annexin V and accelerates the coagulation of plasma. This can be the suggestive cause of miscarriage. After diagnosing inj enoxaparin has been started from the 3rd month of pregnancy with proper dosage regimen which is effective in this patient.

CONCLUSION:

The treatment of this patient is undergoing. The patient is treated with enoxaparin. She is

quit underweight, proper diet plan has been prescribed. The injection will be continued till her delivery.

CONFLICT OF INTEREST STATEMENT:

The author declares no conflict of interest.

REFERENCES:

- [1] Sangle NA, Smock KJ. Antiphospholipid antibody syndrome. Archives of Pathology & Laboratory Medicine. 2011;135(9):1092-6.
- [2] Rand JH, Wu XX, Andree HA, Lockwood CJ, Guller S, Scher J, Harpel PC. Pregnancy loss in the antiphospholipid-antibody syndrome—a possible thrombogenic mechanism. New England Journal of Medicine. 1997;337(3):154-60.
- [3] Hamulyák EN, Scheres LJ, Goddijn M, Middeldorp S. Antithrombotic therapy to prevent recurrent pregnancy loss in antiphospholipid syndrome—What is the evidence?. Journal of Thrombosis and Haemostasis. 2021;19(5):1174-85.
- [4] Tao JJ, Adurty S, D'Angelo D, DeSancho MT. Management and outcomes of women with antiphospholipid syndrome during pregnancy. Journal of Thrombosis and Thrombolysis. 2023; 55(4):751-9.