Case Report

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Pregnancy and Antiphospholipid Antibody Syndrome

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Abstract

Introduction: ALPA is an autoimmune hypercoagulable state caused by antiphospholipid antibodies. It is characterized by thrombotic episodes in arteries, veins and pregnancy related complications like still birth, preterm delivery, miscarriage and severe preeclampsia. We report a case of APLA syndrome due to its rarity.

Case Report: A 28 year old woman with a history of two previous abortions and positive serology for APLAs with 9 months gestation came to our hospital for safe confinement. She was diagnosed as primary APLA syndrome in view of bad obstetric history and positive lupus anticoagulant. She is a known hypothyroidism.

She was on Injection Enoxaparin 0.6 ml OD for 1 year which was changed to unfractionated heparin 14000 units OD subcutaneously after admitting to our hospital. In view of bad obstetric history, an elective caesarean section was planned. Unfractionated heparin was stopped 24 hours before surgery. Preoperative investigations revealed a normal APTT, PT, INR.

Spinal anesthesia given in L3–L4 inter-spinal space with 25G needle after preloading with 500 ml crystalloids and a sensory block up to T6 was attained. She delivered a single live male child with APGAR score 9. Injection Oxytocin 15 units was given intraoperatively. The further perioperative course was uneventful. She was restarted on Injection Enoxaparin 0.6ml OD for 6 weeks.

Conclusion: A successful outcome in a patient with APLA syndrome requires a multidisciplinary approach to prevent both thrombotic and hemorrhagic complications. However, routine screening of pregnant women is not necessary because of it is low incidence.

Keywords: Pregnancy; APLA.

Key Messages: Provide appropriate messages of about 35-50 words to be printed in centre box.

ALPA is an autoimmune disorder with symptoms ranging from recurrent abortions, thromboembolic events, thrombocytopenia. Antithrombotic therapy is a mainstay of treatment given in these patients as the risk of recurrent thromboembolism is high. Intraoperative thromboembolic events in such patients is a challenge for the anaesthesiologist.

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Introduction

ALPA is an autoimmune hypercoagulable state caused by antiphospholipid antibodies. It is characterized by thrombotic episodes in arteries, veins and pregnancy related complications like still birth, preterm delivery, miscarriage and severe preeclampsia. We report a case of APLA syndrome due to its rarity.

Case Report

A 28 year old woman with a history of two previous abortions and positive serology for APLAs with 9 months gestation came to our hospital for safe confinement. She was diagnosed as primary APLA syndrome in view of bad obstetric history and positive lupus anticoagulant. She had history of hypothyroidism with no history of other auto-immune disorders.

She was on Injection Enoxaparin 0.6 ml OD for 1 year which was changed to unfractionated heparin 14000 units OD subcutaneously after admitting to our hospital. In view of bad obstetric history, an elective caesarean section was planned. Unfractionated heparin was stopped 24 hours before surgery. Preoperative investigations revealed a normal APTT, PT, INR

Subarachnoid block was given in L3–L4 inter spinal space with 25G quincke spinal needle. Sensory blockade till T6 was achieved along with motor blockade. She delivered a single live male child with APGAR score 9. Intraoperatively Injection Ondensetron, Injection Oxytocin 15 units and 3 pints of crystalloids was given intravenously. The further perioperative course was uneventful. She was restarted on Injection Enoxaparin 0.6ml OD for 6 weeks.

Discussion

The diagnosis of the antiphospholipid syndrome is based on the occurrence of clinical features and positive serology for APLAs. Antiphospholipid antibodies include anticardiolipin antibodies (aCL) and lupus anticoagulant antibodies (LA). The combination of either anticardiolipin or lupus anticoagulant antibodies with one and more of the characteristic clinical features like thrombosis or recurrent pregnancy loss is termed Antiphospholipid syndrome. Recurrent thromboembolic events, recurrent abortions, valvular lesions, thrombocytopenia and hemolytic anemia.[1,2] The incidence is more in woman's than males (female: male 4.5:1). The prevalence of APLA in the general population is only 2% while it is 30% in women with systemic lupus or thrombosis. It can be primary in the absence of any underlying illness or secondary when associated with other auto-immune disorders 2 Despite their name, lupus anticoagulant antibodies are associated with thromboembolic events rather than clinical bleeding episodes. Pathogenesis of this syndrome is poorly understood, many mechanisms have been described, one being binding of APLAs to endothelial cells, which stimulates an up regulation of the adhesion molecules and an increase leukocyte adhesion leading to a prothrombic state.[4,5] Most recently a catastrophic antiphospholipid variant with a mortality rate of approximately 50% has been described.[6] The mechanism of fetal loss is placental thrombosis leading to placental failure. Platelets may be damaged directly by phospholipid antibody or indirectly by beta 2 glycoprotein 1 which causes platelet aggregation. The damaged platelets adhere to the exposed basement membrane of the endothelium and syncytiotrophoblast resulting in thrombus formation.

In patients with a history of miscarriage, future outcomes of the pregnancy are improved when a combination of aspirin and heparin are used.[6,7] This therapy is withheld at the time of surgery to decrease blood loss and started immediately after delivery and continued for 6 weeks postpartum.

Antiphospholipid antibody can be precipitated perioperatively (thrombotic storm) by surgical intervention, infection or a change in anticoagulation therapy.[6] Intraoperatively anti embolic stockings, intermittent venous compression devices and adequate hydration can decrease the incidence of such complications. The optimal analgesic administration is imperative to facilitate early mobilization, which in turn decreases the incidence of thrombotic events postoperatively. Vigilant monitoring for both bleeding and thromboembolic episodes is required during the perioperative period.

Conclusion

A successful outcome in a patient with APLA syndrome requires a multidisciplinary approach to prevent both thrombotic and hemorrhagic complications. However, routine screening of pregnant women is not necessary because of it is low incidence.

Conflict of Interest: Nil

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