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Thrombotic Storm – Unusual Site of Occurance of Venous Thromboembolism During Puerperium

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ABSTRACT *- Pregnancy and the puerperium are well-established risk factors for venous thromboembolism (VTE), which occurs with a prevalence of 1 in 1600 [1] .Timely management of the same can reduce the risk of mortality to signifiacant level. Following is a case of APLA syndrome that manifested in the post partum period with multiple vein involvement.*

KEYWORDS : internal jugular vein thrombosis, deep vein thrombosis , post partum APLA syndrome

INTRODUCTION –

venous thromboembolism in peurperium has a very rare occurance with high mortality rate. pulmonary embolism which is a complication of VTE is 7 th main cause of maternal death.

The incidence proportion of postpartum venous thromboembolism was highest during the first 3 weeks after delivery, dropping from nine per 10,000 during the first week to one per 10,000 at 4 weeks after delivery and decreasing steadily through the 12th week [2]. APLA is a major contributor for recurrant miscarriages in antenatal period , but involvement of it for multiple venous thrombus formation is a rare and life threatening condition.

CASE REPORT-

27 years Para 1 Live 1 delivered by emergency LSCS , One week ago, came with complaints of swelling of face and blurred vision for 3 days. Positive history of lack of sleep and behavioural changes were noted. she had delivered 7 days ago by emergency LSCS for fetal distress. There were no antenatal or post operative complications till the time of discharge. On admission her vitals were stable and she was noted to have mild pallor, facial puffiness, periorbital swelling and swelling of neck. Systemic examination was within normal limits. [Figure 1] blood parameters were normal , ultrasound neck revealed Internal jugular vein thrombosis. MRI revealed an extensive thrombosis of bilateral internal jugular vein, subclavian vein , axillary vein and superior vena caval thrombosis . Detailed haematology examination revealed positive for anticardiolipin antibodies and lupus anticoagulant. Patient was started on intravenous injection heparin follwed by low molecular weight heparin, after obtaining rheumatologist opinion. patient was discharged in a healthy state after 1 week of intensive therapy in a multi disciplinary set up.

DISCUSSION

During the first 6 weeks postpartum, women's risk of venous thromboembolism increases byb 21.5-fold to 84-fold from baseline than in nonpregnant state [3].APLA (Anti phosphor lipid antibody syndrome) is hypothesised to act via the following mechanisms Production of antibodies against coagulation factors, including prothrombin, protein C, protein S, and annexins Activation of platelets to enhance endothelial adherence Activation of vascular endothelium, which, in turn, facilitates the binding of platelets and monocytes[3-6][Figure 2] Clinically, the series of events that leads to hypercoagulability and recurrent thrombosis can affect virtually any organ system, including the following: Peripheral venous system (deep vein thrombosis [DVT]) Central nervous system (stroke, sinus thrombosis, seizures, chorea, reversible cerebral vasoconstriction syndrome) Peripheral nervous system (peripheral neuropathy including Guillain–Barré syndrome) Hematologic (thrombocytopenia, haemolytic anaemia) Obstetric (pregnancy loss, eclampsia) Pulmonary embolism [PE], pulmonary hypertension) Renal (thrombotic microangiopathy)[6-7]

CONCLUSION

Management involves timely diagnosis with ultra sound Doppler being the gold standard investigation and anti coagulant therapy.[5]. Initial management is with intravenous unfractionated heparin followed subcutaneous low dose heparin for thromboprophylaxis. Patient should be monitored for Heparin Induced Thrombocytopenia (HIT) syndrome.

Figure 1 – diffuse facial and neck swelling with peri orbital edema.

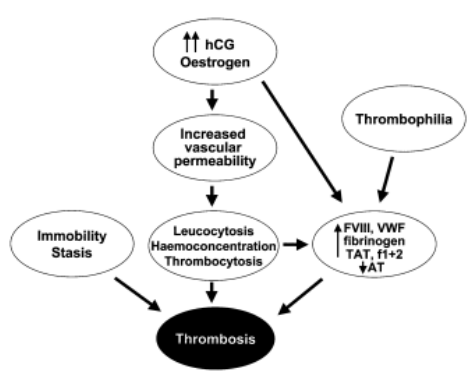

Figure 2 – mechanism of thrombus formation.

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