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Letter to Editor

Successful Anaesthetic management of a diagnosed case of ITP with pregnancy undergoing lower section caeserian section

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Sir,

ITP (Idiopathic Thrombocytopenic Purpura) most common immune mediated disorders in pregnancy[1] and women in reproductive age group either previously diagnosed with varying degrees of haemorrhagic manifestations or diagnosed incidentally in a healthy pregnant woman. The pathogenesis of ITP in pregnancy is similar to that of non-pregnant patients which characterized by the presence of autoantibodies IgG, against platelet membrane glycoproteins, mainly GPIIb/IIIa and GPIb/IX, and its removal by the reticuloendothelial system.[2] It usually doesnot cause any foetal developmental deformities but due to substantial risk of inducing perioperative haemorrhage ITP needs careful monitoring, Here we are presenting the anaesthetic management of parturient undergoing LSCS with a platelet count[3] was 3000 μL^{-1}.

A 34 years old pregnant lady, weighing 79.2 kg, gravida 3, para 1 with gestational age, 36 weeks 3 days, who was diagnosed 8years back as ITP which was refractory to steroids, admitted to our hospital with petechie and wet purpura.[4] Her platelet count was 3000 for which haemtologist consultation taken, and she was put on intravenous immunoglobulin treatment 30 gm daily, for 5 days. She was already on azathioprine for the last one month. However, her platelet count reached to 30,000 μL^{-1} on 3^{rd} day of treatment which was further reduced to 24,000 μL-^{1} the next day. As advised by haematologist, one unit of single donor platelets (SDP) was transfused on the day of surgery prior to the caesarean section and adequate units of platelets and packed red blood cells were reserved for the surgery. We have obtained informed consent of the patient to undergo caeserian section under general anaesthesia.[2,5] After attaching all ASA standards monitoring two peripheral venous line with 18G and 20G established along with right radial artery cannulation for IBP (Invasive blood pressure) monitoring and crystalloid infusion started. Premedication for acid prophylaxis was done with inj.ranitidine and metoclopramide and inj.glycopyrrolate as antisialagogue. Prior to induction her vitals were BP 140/90mmHg, Heart rate 90/min and SpO2 was 99% in room air. After preoxygenation for 3minutes with 100% oxygen, patient was induced with 140mg of Propofol and for intubation 100mg Succynylcholine was used. Maintenance of anaesthesia was performed with sevoflurane 1-2% in a 50% air/oxygen mixture. A baby boy 3250 g in weight was delivered 10 minutes after the induction of anaesthesia and was having APGAR scores of 9 and 10 at1st and 5th minute respectively. Inj. Fentanyl 75 μg intravenous bolus was given while sevoflurane inhalation was continued after delivery of the baby. Patient was given an intravenous bolus of oxytocin 5 IU, followed by infusion of 20 IU oxytocin in 500 mL 0.9% NaCl solution. Haemodynamic parameters were stable throughout

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the operation. In the intraoperative period, she received one unit of SDP,[6] 500 mL of 0.9% NaCl and 500 mL of Ringer's Lactate solution and had 500 mL of urine output. A total volume of 1000 mL of haemorrhagic fluid was aspirated, including irrigation solution. Postoperative Anaelgesia was maintained with Inj.paracetamol and inj.Tramadol. Patient extubated uneventfully at the end of operation and shifted to Intensive Care Unit. Her platelet count on the first post-operative day was 18,000 μL^{-1} for which she was transfused 4 units of platelets. The newborn had also uneventful course during the stay. Patient and the baby was discharged on 5^{th} postoperative day with follow-up advise.

The incidence of pregnant women with ITP is 1–2/1000 whereas ITP comprises 5% of pregnancy related thrombocytopenia cases. Gestational thrombocytopenia is seen in 5.8% of all pregnancies and comprises 75% of pregnancy related thrombocytopenia[2] cases but diagnosis of gestational thrombocytopenia can only be done by exclusion of other causes of thrombocytopenia. Platelet transfusion is generally not recommended, however, it may be life-saving in cases of extremely low platelet count and acute bleeding.

On concluding remark, Anaesthetic management in parturients with ITP requires meticulous preparation with time constraint right from the admission itself.

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