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# A RARE CASE OF PREGNANCY WITH REFRACTORY IDIOPATHIC THROMBOCYTOPENIC PURPURA

## Introduction

Immune thrombocytopenic purpura (ITP; also termed idiopathic thrombocytopenic purpura) is an acquired disorder in which there is immune-mediated destruction of platelets and possibly inhibition of platelet release from the megakaryocyte. [1]

ITP occurs in one or two of every 1000 pregnancies and accounts for 5% of cases of pregnancy associated thrombocytopenia.[2]

## Objectives

A rare case of Refractory ITP diagnosed for the first time in pregnancy and to discuss the challenges encountered in the management

## Methods-Case study

The patient was referred to our tertiary care hospital with persistent low platelet counts and a history of multiple blood transfusions. She is a 32-year-old G5P2L2A2, at 35 weeks of pregnancy with cephalic presentation, diagnosed with refractory immune thrombocytopenic purpura (ITP) and gestational diabetes mellitus (GDM) requiring insulin. Her obstetric history includes a prior normal vaginal delivery. Her platelet count had been persistently below 60,000/µL, and she was diagnosed with ITP at 31 weeks of pregnancy. She had received multiple blood transfusions and IV immunoglobulin (IVIg) therapy.

On clinical examination, the patient was stable, but pallor was noted, along with an overdistended uterus and mild splenomegaly, confirmed by radiological imaging. Her lab results showed haemoglobin of 9.6 g/dL, platelets of 47,000/µL, and a total white blood cell count of 11.2 x $10^3$/µL. Peripheral blood smears revealed giant platelets, confirming thrombocytopenia.

After evaluating all potential causes of thrombocytopenia, a diagnosis of refractory ITP was made, unresponsive to steroid pulse therapy and transfusions. Antenatally, she was treated with steroids (1 mg/kg for 4–8 weeks), a 1g stat dose of IVIg, and six doses of weekly subcutaneous romiplostim (1 mcg/kg)following consultation with a specialist. She responded well, and by the time of delivery, her platelet count had risen to 60,000/µL.

The patient underwent a preterm elective caesarean section at 36 weeks and 2 days of pregnancy due to uncontrolled gestational diabetes and refractory ITP. The procedure was uneventful.

Pre operatively , 1 pint single donor plasma was transfused and intra operatively, 1 more pint of single donor plasma. Post operatively packed red blood cells were transfused. Postnatally, she continued steroid therapy, romiplostim, and dapsone (100 mg BD). Breastfeeding was discouraged due to the transmission of dapsone through breast milk, and donor milk was provided for the baby.

The patient was instructed to follow up with serial platelet counts. She complied with follow-up visits for 6 weeks, during which her medications were gradually tapered off.

## Results

Pregnancy was terminated by preterm elective lSCS under general anaesthesia , a healthy female baby of 2.6kg born with uneventful intraoperative findings

## Disscusion

The management of ITP starts with a thorough workup, including lab tests, ultrasonography, and assessment of hemodynamic stability, to establish the diagnosis of ITP. The primary goal is to maintain a platelet count above 50,000/µL.

If the platelet count is below 50,000/µL,treatment recommendations as per reference.

Blood products should be arranged and transfused according to the severity of thrombocytopenia and the mode of delivery. There is no significant difference in fetal prognosis between normal vaginal delivery and caesarean section (LSCS). Proper postnatal care and treatment should be provided for both the mother and the newborn.

## Conclusion

Refractory ITP in pregnancy is rare but a morbid condition which can have various differential diagnosis .Early diagnosis is a crucial in preventing unexpected complications and reducing maternal morbidity and mortality.

### References

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