



THROMBOCYTOPENIA ASSOCIATED WITH PREGNANCY : A CASE REPORT DESCRIBING THE APPROACH AND MANAGEMENT

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INTRODUCTION

- Normal range of platelet count in pregnancy is 1.5-4.5 lacs/ μ l and a Platelet count below this level is termed thrombocytopenia that occurs in approximately 8-10% cases of all pregnancies.
- Around 75% of such cases are benign gestational thrombocytopenia which is usually found incidentally, mostly in 3rd trimester and resolve quickly after delivery
- According to ACOG ,counts are typically $>70\ 000/\mu$ L and <1 lakh/ μ L
- In rare cases it can be $<50000/\mu$ L but the condition is benign and usually there is no risk of bleeding to mother and fetus
- Pathophysiology behind this condition is accelerated platelet consumption via exaggeration of physiologic process across placenta and possibly via mild immune process.

HISTORY & EXAMINATION

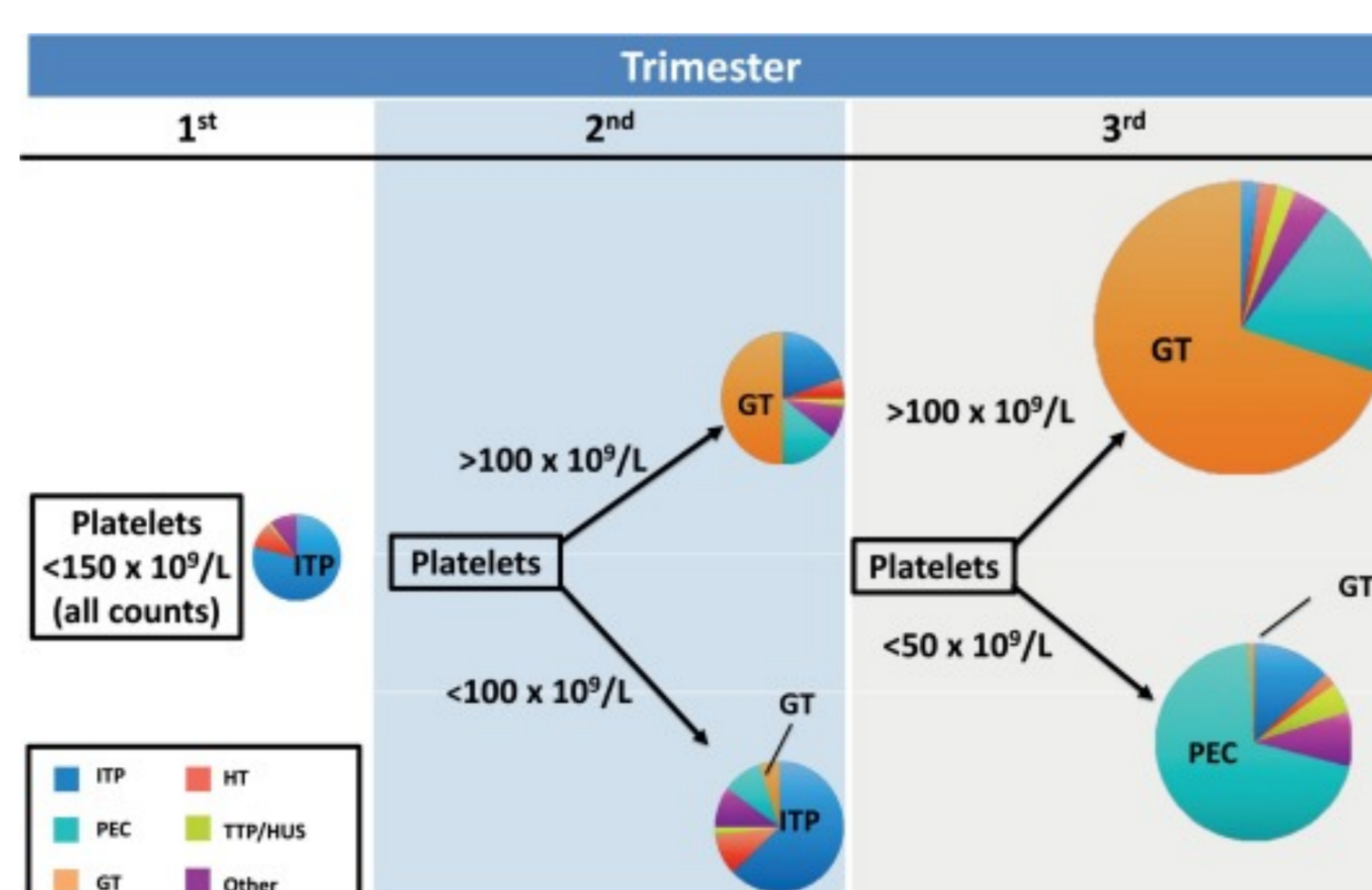
- A 27 years old G2P1L1 at 37+4 weeks period of gestation with prev 1 LSCS done 5 years back, presented with c/o pain abdomen since 2 days and decreased fetal movements since 1 day . Patient was on regular ANC follow up and on admission NST done was reactive with category 1 .
- investigations were sent suggesting thrombocytopenia with platelet count 29000/UI with repeat test done same day suggesting counts 39000/uL.Patient previous reports done 1 month back were WNL.
- Her previous pregnancy was uneventful
- There was no history of any bleeding diasthesis previously even in present pregnancy and platelet counts done 1 month back were WNL.
- Vitals were stable and there was no significant finding on general and systemic examination.

OBSTETRIC EXAMINATION

- Per Abdomen examination: transverse lower segment transverse scar was seen with uterus corresponding to 36 weeks period of gestation ,longitudinal lie, cephalic presentation,SFH-37cm and there was no scar tenderness on examination with FHR-140bpm regular in rhythm
- PS : os was closed with no leaking
- PV-cervix was soft .posterior admitting tip of finger ,uneffaced, head was high up
- Pelvis was adequate

INVESTIGATIONS

- All ANC investigations were WNL including platelet count done 1 month back
- Platelets count done on admission suggested thrombocytopenia with count 29000/ μ L with repeat testing done same day suggesting 39000/ μ L .rest investigations including Hb was WNL.
- Peripheral blood smear findings suggested moderate thrombocytopenia with count 60000/ μ L
- All coagulation profile sent including PT, aPTT, INR were WNL.D-dimer and fibrinogen levels were mildly high. Direct Coomb testing and ANA was negative RFT was WNL .LFT was WNL except mild increase in levels of AST and ALT.
- USG Obstetrics with color doppler done after admission suggested reduced PI and RI in MCA with increased diastolic flow .



CLINICAL MANAGEMENT

- Patient presented to AIIMS labour ward at 37+4 weeks gestation with c/o pain abdomen
- Emergency LSCS was done after transfusion of 2 units Random donor platelets before the surgery.
- Patient was discharged with normal postnatal care advice and was advised to follow up with repeat CBC and LFT to be done after 6 weeks
- A term alive girl baby of 4 kg was delivered by vertex
- Routine care was given to baby and was shifted to mother side.
- Blood sample taken from baby were WNL with normal platelet counts
- Repeat platelet count of patient 2 days after surgery was WNL with count 1.5 lacs/ μ L

CONCLUSION

- Gestational thrombocytopenia is usually a diagnosis of exclusion and no specific tests are available to distinguish it from other causes of thrombocytopenia especially ITP
- Usually platelet count is $>70000/\mu$ L but if counts are $<80000/\mu$ L in pregnancy cord samples should be taken to ensure baby counts are WNL.
- Thrombocytopenia can be further classified in to mild (<1 lakh/ μ L), moderate (50000-1lakh/uL) and severe ($<50000/\mu$ L).
- At delivery im injection (vit K) and elective procedures such as circumcision should be reserved until platelet counts of baby are known
- Mode of delivery is decided on basis of obstetric indication only and epidural anaesthesia should be considered if only platelet count is $>80000/$ and if it less then cord sample must be taken as there is increased risk of maternal bleeding complication and fetal thrombocytopenia.

References

- Palta, A., and P. Dhiman. "Thrombocytopenia in pregnancy." Journal of Obstetrics and Gynaecology 36.2 (2016): 146-152.
- Stavrou, Evi, and Keith R. McCrae. "Immune thrombocytopenia in pregnancy." Hematology/Oncology Clinics 23.6 (2009): 1299-1316.
- Letsky, E. A., and M. Greaves. "Guidelines on the investigation and management of thrombocytopenia in pregnancy and neonatal alloimmune thrombocytopenia. Maternal and Neonatal Haemostasis Working Party of the Haemostasis and Thrombosis Task Force of the British Society for Haematology." British journal of haematology 95.1 (1996): 21.
- McCrae, Keith R. "Thrombocytopenia in pregnancy." Hematology 2010, the American Society of Hematology Education Program Book 2010.1 (2010): 397-402.