

Introduction: Sickle cell hemoglobinopathies are genetically inherited haemoglobin disorders. Pregnancy-related physiological changes heighten risks of vaso-occlusive crises, thromboembolic events, and compromised uteroplacental circulation, leading to potential catastrophic outcomes.

Objectives:

- To highlight haemoglobinopathies impact on pregnancy.
- Effectively assess anemia in pregnancy, considering differential diagnosis to ensure appropriate management strategies for maternal and fetal health.

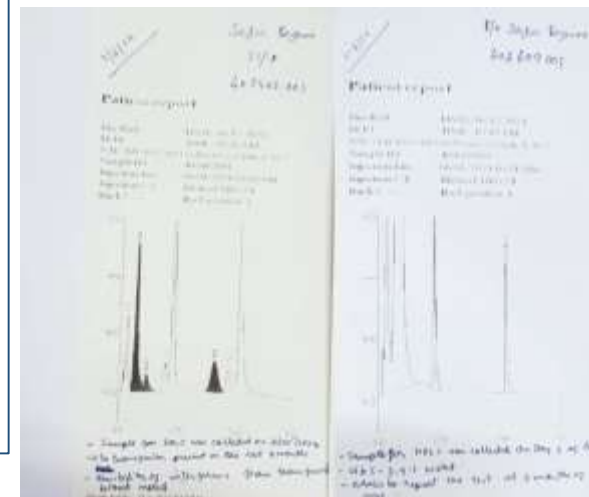
Case Study:

A 21 year old short primigravida, known case of sickle cell disease(SCD) since 6 years of age was booked with us and admitted for safe confinement at 36 weeks of gestation. She was under hematology follow-up and was on Tab Hydroxyurea until before conception. She had multiple blood transfusions during vaso occlusive episodes prior to and during pregnancy. Prophylactic pneumococcal, meningococcal vaccinations were given. She was started on LMWH and aspirin. During the hospital stay she developed acute pain crisis which was managed by a multidisciplinary team. Post-resolution, she underwent an Elective LSCS for Cephalo Pelvic Disproportion, delivering a healthy baby.

Discussion: Strengthened antenatal care including blood investigations and awareness and anticipation regarding complications ensured safe outcome. The neonate was screened for SCD and found to be negative. This approach highlights the importance of coordinated care for optimal maternal and neonatal outcomes in complex pregnancies

Conclusion:

1. Pregnant SCD patients face heightened maternal and perinatal risks.
2. Screening for sickle cell and multidisciplinary management including fetal medicine and hematologist ensures complication prevention, and optimal management during pregnancy.
3. Early delivery reduce risks of complications, preeclampsia, and mortality.



References:

Kroner, Barbara L., et al. "Pregnancy outcomes with hydroxyurea use in women with sickle cell disease." *American journal of hematology* 97.5 (2022): 603-612
 Shegekar T, Pajai S. A Comprehensive Review of Pregnancy in Sickle Cell Disease. Cureus. 2023 Jun 30;15(6):e41165. doi: 10.7759/cureus.41165. PMID: 37525766; PMCID: PMC10387184

Acknowledgment: none

Conflict Of Interest: none