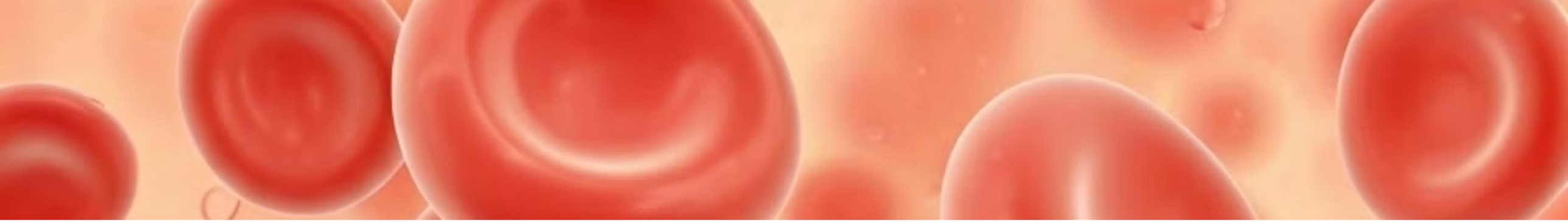

Beyond Preeclampsia: A Case of Sickle Cell Disease, Hemolysis, and Prolonged Expectant Management in Pregnancy

BACKGROUND

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Sickle cell disease (SCD) in pregnancy → ↑ maternal morbidity (preeclampsia, transfusion needs)

High risk of **alloimmunization** due to repeated transfusions

Delayed Hemolytic Transfusion Reaction (DHTR)

Occurs 5–10 days post-transfusion

Immune-mediated destruction of donor RBCs

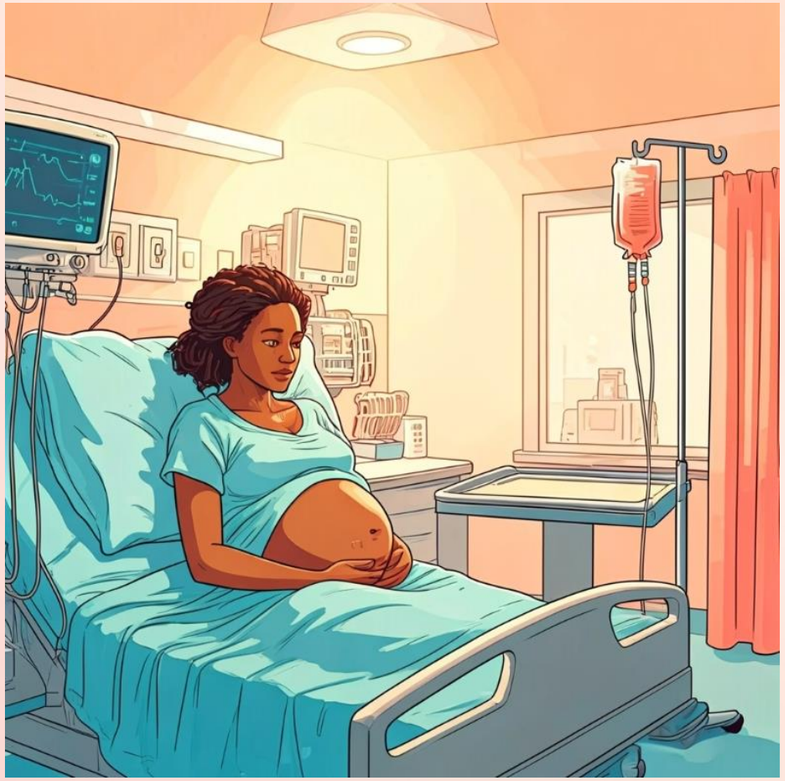
Hyperhemolysis Syndrome

Destruction of **both donor and native RBCs**

Can cause Hgb to fall **below pre-transfusion levels**

Clinical overlap with HELLP syndrome complicates diagnosis

Key danger: **Additional transfusion may worsen hemolysis**



THE CASE

1

29 y.o. G3P0202 with HbSS at 32+3 weeks

2

Recent pain crisis + preeclampsia, received PRBC transfusions

3

Re-presented with worsening anemia + elevated LFTs

4

Labs: ↑ LDH, ↑ bilirubin, ↓ haptoglobin, DAT C3+, cold agglutinins

5

Hgb continued to decline despite transfusion

Held transfusions

Initiated IVIG + steroids

Prolonged inpatient course → multidisciplinary planning

Urgent C-section for cord prolapse → good outcome

TEACHING POINTS

Suspect DHTR/Hyperhemolysis

Hemoglobin falls after transfusion, especially with **reticulocytopenia** and **DAT C3+**.

Avoid Reflexive Transfusion

More blood may **worsen hemolysis**; transfuse only if necessary with extended antigen matching.

IVIG and Corticosteroids First-Line

Treat the underlying immune process, not just the anemia.

Anesthetic Management

Prevent hypoxia, hypothermia, acidosis, and hypovolemia with **early neuraxial planning**.

Delivery is Not Curative

Coordinate care closely; delivery resolves the obstetric issue, but not the underlying hemolysis.

The Importance of Early Multidisciplinary Coordination

Coordinate hematology, blood bank, anesthesia, and OB to guide transfusion decisions and safely plan delivery.