

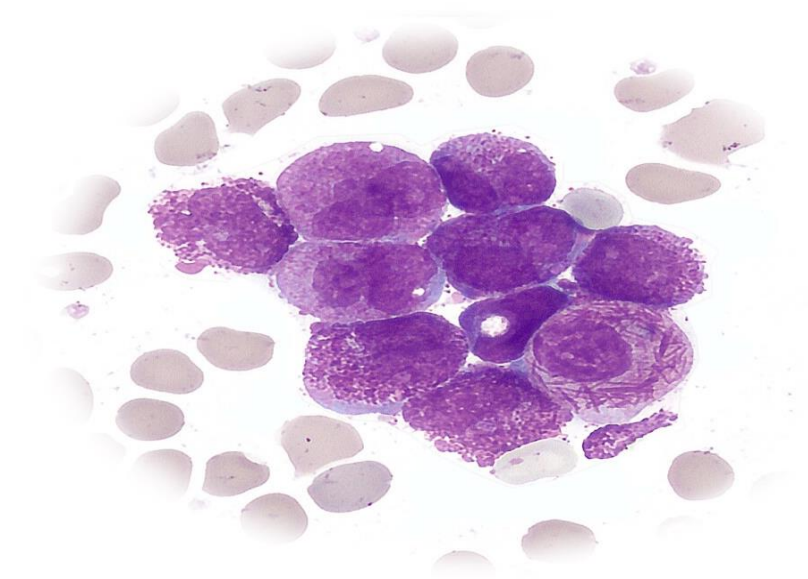
Anesthetic Management for Cesarean Delivery in a Patient with Acute Promyelocytic Leukemia



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- Acute promyelocytic leukemia (APL) in pregnancy is a rare yet challenging clinical scenario that requires thoughtful multidisciplinary collaboration.
- Anesthetic management must address coagulopathy, thrombocytopenia, and other disease-related factors to ensure maternal and fetal safety



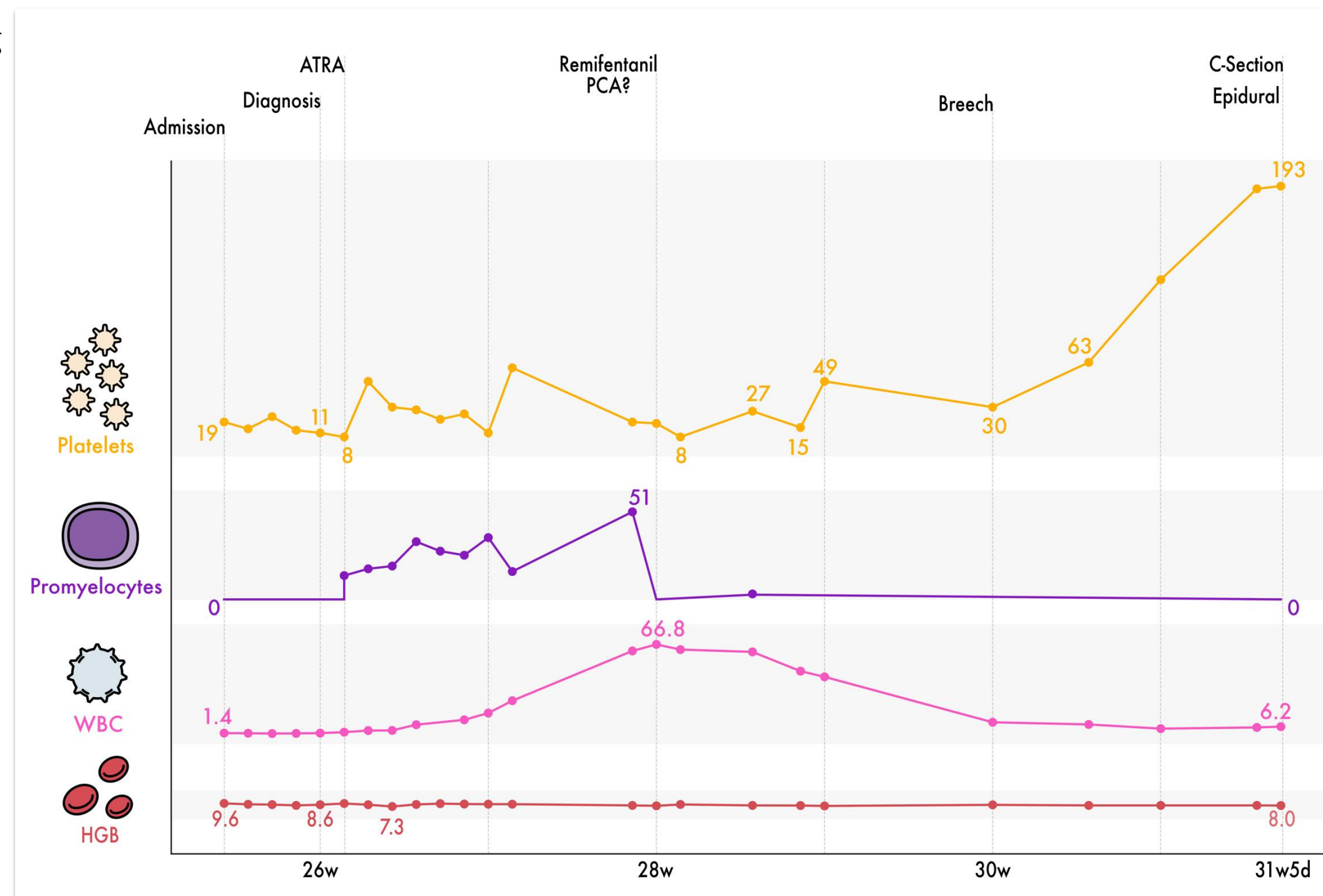
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Patient Case

- 31-year-old primigravida at 26 weeks with a 2-week history of bruising
- Pancytopenia leading to APL confirmation via bone marrow biopsy
- Initial Condition:**
 - Platelet count 14,000/ μ L at admission, nadir of 8,000/ μ L
 - Markedly abnormal thromboelastography
- Management Course:**
 - ATRA treatment initiated
 - Initial plan for early delivery (~28 weeks)
 - Original analgesia plan: remifentanyl PCA
 - Delivery postponed as condition improved
 - Platelet count recovered to >60,000/ μ L by 30 weeks
- Delivery:**
 - Cesarean at 31 weeks 5 days due to breech presentation
 - Epidural anesthetic successfully administered
 - Favorable outcomes for both mother and neonate



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Discussion

Management Challenges:

- Coagulopathy
- Infection risk
- Preeclampsia
- Placental insufficiency
- Placenta abruption

ATRA Therapy Complications:

- Differentiation syndrome
- Liver toxicity
- QT interval prolongation
- Neurotoxicity

Anesthetic Considerations:

- Limited data exist on maternal-fetal outcomes in pregnant women with APL^[1]
- Remifentanyl PCA: alternative for severe thrombocytopenia
- When platelet counts become sufficient and cesarean delivery is indicated: epidural vs spinal ?
- Theoretical concern: CNS seeding during dural puncture^[2]