Anesthetic Management for Cesarean Delivery in a Pancreas-Kidney Transplant Recipient with Renal Graft Failure

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- Physiologic changes:
  - Pregnancy: increased plasma volume, anemia
  - ESRD: impaired renal volume and solute clearance, anemia
- Hemodialysis often 6 days/week during pregnancy
- Pancreas-kidney transplant (SPKT) recipient risks: preterm labor, miscarriage, low birth weight, HTN, preeclampsia, graft dysfunction and rejection, C/S
- Risks during Cesarean delivery in SPKT recipients: difficult surgical exposure due to adhesions, graft injury, acute blood loss in chronic anemia

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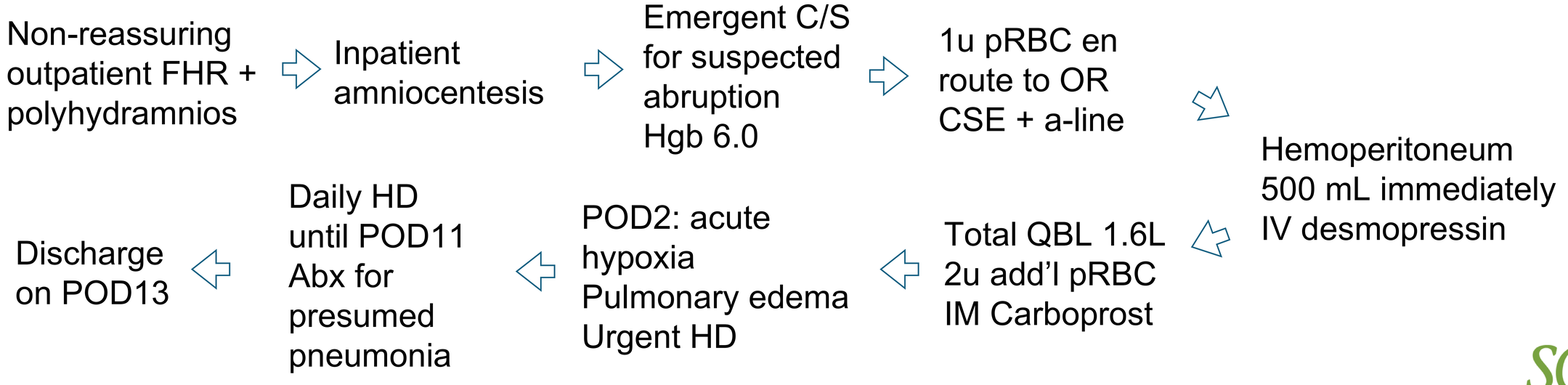
Case: 39F G4P0211 @ 29w1d

PMH: T1DM with nephropathy (s/p SPKT w/ renal graft rejection), gastroparesis, neuropathy, arthropathy, vasculopathy, retinopathy, seizures, hypertension

HD 6 days/week via AVF (missed 2x in prior week). IS tacrolimus + azathioprine

Surgical & OB History: Kidney-Pancreas transplant, 2 C/S, 1 D&E



Teaching Points

- Prenatal invasive procedures (amniocentesis) in medically complex obstetric patients may have anesthetic implications
- Up to 70% C/S rate for SPKT recipients
- Surgical considerations lead to a longer duration anesthetic
- Challenging blood/fluid management with baseline anemia, physiologic anemia of pregnancy, and bleeding risk
- Comorbidities may prevent use of tranexamic acid, methylergonovine, or prostaglandin F2α
- Azathioprine and tacrolimus are generally safe during pregnancy

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