Coagulopathy and Post-partum Hemorrhage after Undergoing Selective Termination of Two Fetuses in a Triplet Pregnancy

Abstract Type: Case Report/Case Series
Ronen Harris, M.D.; Laurie A. Chalifoux, M.D.; Nicole Higgins, M.D.
Northwestern University Feinberg School of Medicine

Introduction: Multifetal gestation has higher morbidity and mortality rates than singleton or twin pregnancies. Women with multiple gestation may choose selective termination (ST) of one or more fetuses. The procedure is considered safe, despite the terminated fetus(es) remaining in-utero.

Case: 41yo at 28 wks gestation presented with PPROM, in labor. The original pregnancy was triplet and at 19 wks she underwent ST of triplets A/B due to twin-twin transfusion syndrome (TTTS). Neuraxial analgesia was initiated with combined spinal epidural (CSE) technique. The anesthesia team was unaware of the ST, but once aware ordered a coagulation panel, demonstrating fibrinogen of 78mg/dL. Patient delivered demised triplets A/B with 300mL blood loss. After delivery of C, uterine atony was noted, requiring increased oxytocin, methylergonovine and bilateral uterine artery embolization. Total EBL was 2300mL, hemoglobin 7.9g/dL, fibrinogen 46mg/dL and normal INR/PT/aPTT. Given coagulopathy, epidural catheter was left in situ. 2 units of cryoprecipitate and 1 unit packed cells were transfused and fibrinogen improved to 206mg/dL. On postpartum day 2 the epidural catheter was removed and she was discharged.

Discussion: Infants of multiple gestation have higher morbidity/mortality rates than singleton/twin pregnancies. There is also a higher risk of preterm delivery among triplets. Also, women with multifetal gestation (triplets or more) are at higher risk for complications. Thus, women may choose Multiple Pregnancy Reduction (MPR), reducing triplets to a singleton/twin pregnancy. The procedure is done at wks 10-13. One advantage of early MPR is that the reduced fetus desiccates, becoming part of the surviving fetus' membranes/placenta. Whereas MPR is a technique used to minimize the morbidity/mortality of the surviving twin(s); ST is a procedure in which 1 or more fetuses are not randomly terminated and is usually done later in pregnancy. Instead of the terminated fetus desiccating, the fetus is often not resorbed. It slowly condenses and is delivered with the placenta of the preserved twin. Given profound TTTS, our patient elected ST of triplets A/B. After CSE catheter placement the anesthesia team discovered the ST, and that products of conception remained in situ. In a study of 100 STs, 3 women developed lab evidence of coagulopathy, none with evidence of DIC. In a study of intrauterine fetal demise, retention of the fetus increased the risk of chronic consumptive coagulopathy. Our patient had isolated hypofibrinogenemia 10 wks post ST. The risk of epidural hematoma is low, but theoretical risk still exists. Given no guiding evidence, we chose to monitor for hematoma formation and remove her epidural catheter after coagulopathy resolved.

References:
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