Parturient Post Vaginal Delivery Developed an Atonic Uterus, DIC and Severe Pulmonary Edema, Which Resulted in Mortality

Abstract Type: Case Report/Case Series
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Introduction: Pregnancy-related mortality is calculated as the number of pregnancy related deaths divided by the number of live births. Although this number has decreased nearly 100-fold since 1900, it has not changed appreciably since 1982. The current statistics report 11.8 deaths per 100,000 live births. The pie chart below demonstrates causes of pregnancy related mortality (Exhibit A).

We present a parturient that underwent a vacuum assisted vaginal delivery, subsequently suffered a post-partum hemorrhage due to atonic uterus. Within the hour, post delivery, patient developed DIC, severe Pulmonary Edema, which lead to complete cardiovascular collapse and subsequent mortality. We believe that the cause for this tragic event was Amniotic Fluid Embolism.

Case Report: 29 year old F sp NSVD was rushed to the OR for exam under anesthesia. After vacuum assisted vaginal delivery patient experienced postpartum hemorrhage which resulted in a 1.5-2 L loss of blood. Her vitals upon arrival to the OR were: BP – 60/39, P – 139, O2 sat – 98%. Pt was given crystalloid and colloid fluids for resuscitation. Originally blood pressure responded to fluid boluses. Shortly patient was noted to ooze from everywhere. She also started to desaturate and upon intubation, pink frothy fluid came out from the ET tube. Patient was transfused numerous blood products to keep up with ongoing blood loss and to treat DIC. Pulmonary edema continued to worsen. TEE showed diffuse hypokinesis of R and L ventricles with an EF<25%. Patient’s hemodynamics continued to worsen, pressors were started, and transfusions of products were continued. 2/2 hours into the case patient had a sudden drop in BP and saturation, refractory to any treatment. ACLS protocol was initiated and patient was coded for one hour with out any positive Results. Medical examiner report is pending.

Discussion: A number of causes were considered in an attempt to explain the tragic outcome. TRALI, Hemolytic Transfusion Reaction, Acute Post-Partum Cardiomyopathy, PE and Amniotic Fluid Embolism were on our list of differentials. We believe that Amniotic fluid Embolism is the most likely cause of the patient’s mortality, because it best ties together all that transpired. AFL has two phases: 1) Early phase –consists of transient pulmonary vasospasm, low CO which leads to hypoxemia and hypotension. 2) Second phase-consists of LV failure and severe pulmonary edema. 66% of women with AFE develop DIC and many develop uterine atony. We believe that our parturient survived the first phase of AFE, but was not able to tolerate the second phase.