Amniotic fluid embolism (AFE) is an unexpected and often fatal complication that can occur during pregnancy and peripartum period. The clinical course can lead to severe complications, however early diagnosis and prompt treatment can decrease the morbidity and mortality.

Here we describe a case of dramatic presentation of AFE wherein early suspicion and prompt treatment resulted in a favorable outcome.

A 38-year-old G3P1 female at full term without significant past medical history presented for induction of labor. Initial exam was unremarkable.

Labor was induced with dinoprostone, and the patient was transported to L&D when vaginal exam was consistent with 3cm. During valsalva, the patient suddenly became unresponsive and cyanotic with significant respiratory distress. Oxygen saturation was 70% and blood pressure was not obtainable. Following endotracheal intubation and positive pressure ventilation, the oxygen saturation increased to 100%, simultaneously vacuum-assisted vaginal delivery was performed with newborn resuscitation. A left radial arterial-line and central line were placed. Initial ABG showed pH 7.0|pCO2 48|pO2 141|HCO3 11| B.E. -18|Saturation 97% on FIO2 100%. The patient was immediately given 2 amps of sodium bicarbonate with ABG improving to 7.3|34|367|16|9|100. The presence of excessive blood in the oropharynx led to a high clinical suspicion of impeding disseminated intravascular coagulation. The patient was quickly transfused with packed red blood cells and fresh frozen plasma. Coagulation labs done pre-transfusion revealed a PT 18.7, PTT 45.5, INR 1.6, fibrinogen 278. Echo showed severely enlarged right ventricle with severely reduced systolic function and normal left ventricular function. The patient received a total of 7 units fresh frozen plasma, 6 units packed red blood cells, 2 units of platelets, 2 units of cryoprecipitate and factor VII.

The patient's hospital course was significant for both a negative lower extremity doppler for deep vein thrombosis and CT angiogram to rule out pulmonary embolism. Extubation was on post-partum day 2, and discharge on day 6 with no neurological deficits noted on exam.

Discussion: Since the incidence of AFE is rare (~ 1 in 16,700 deliveries) and is a diagnosis of exclusion, our case presentation is remarkable for the dramatic presentation, immediate suspicion and early intervention in the successful treatment of our patient (1). Based on the observation of rapid onset, and unusual bleeding, we leaned quickly to the diagnosis of AFE and started treatment without waiting for confirmatory labs. Prompt treatment with blood products likely led to the prevention of fulminate DIC. Moreover, the quick delivery of the fetus likely improved venous return and preload to the heart(1). Positive pressure ventilation immediately after the onset of respiratory distress quickly corrected hypoxia.