

International Conference on GYNECOLOGY AND WOMEN HEALTH

June 13-14, 2022 | Webinar

MATERNAL COLLAPSE IN LABOUR-SUCCESSFUL FETOMATERNAL OUTCOME IN SUSPECTED AMNIOTIC FLUID EMBOLISM

Maryam Zubair

Azad Jammu and Kashmir Medical College, Pakistan

Introduction: Maternal collapse in pregnancy is a very distressing condition for health care providers that need immediate action to save maternal life as it carries a very high fatality rate. We report case of a 27 years old Primigravida who collapsed in labor with suspicion of amniotic fluid embolism. Amniotic fluid embolism is a rare but fatal condition that has a very high mortality rate ranging between 20 to 60%.¹ It presents with sudden onset of breathlessness, cardiovascular or respiratory collapse and Disseminated intravascular coagulation (DIC) during antenatal, intra-partum or postnatal period. Amniotic fluid embolism (AFE) is characterized by triggering of acute anaphylactic reaction by entry of amniotic fluid or other debris into the maternal circulation. It activates the complement system leading to vasospasm, edema, and early onset disseminated intravascular coagulation (DIC). Early identification, immediate and effective resuscitation can save maternal lives. AFE has two clinical types: (1) cardiopulmonary collapse type and (2) DIC type.² The serum levels of C3 and C4 complement had a high sensitivity and specificity for the diagnosis of AFE.³ The C1 esterase inhibitor is decreased in patients with AFE.⁴ Risk factors for AFE include advanced maternal age, excessive amniotic fluid, rupture of membranes, and labor induction. Neurological impairment is the most common complication followed by renal failure, cardiac failure with left ventricular impairment, and arrhythmia have been reported.⁵ The recommendations to treat AFE include immediate effective resuscitation of patient by ensuring a multidisciplinary team approach, early ventilation, good hemodynamic support to manage shock and coagulopathy and immediate delivery in patients with cardiac arrest.

Case Presentation: We report a case of 27 years old Primigravida who was offered induction of labour with PGE₂ at 41 weeks of gestation. She had spontaneous rupture of membranes at 4cm followed by sudden collapse in labour room at 1049 hours on 26.9.2021. On examination she was pulseless, BP less with central cyanosis and frothing from mouth. Immediate CPR was started and patient was shifted to operation room with ETT and AMBO bag. Rhythm assessed was SVT and patient was defibrillated on OT table. Peri-mortem cesarean section was performed to improve maternal resuscitation at 1054 hours. An alive baby boy was delivered and resuscitation was continued. Upon revival patient was shifted to intensive care unit and kept on ventilator support. Her labs were collected and serial daily monitoring of labs was done. Her PreOperative Hb was 11.6g/dl, platelets= 314×10⁹, TLC= 12.5×10³. Post-Op Hb was 9.8g/dl, TLC was 24×10³, Platelets =249×10⁹. Her renal and liver function tests were normal, Serum Na=138 mmol, Serum K= 6 mmol, PT/PPTK was normal, D-Dimers=10,000. ECG showed sinus rhythm with normal axis and 2-D Echocardiogram showed Ejection fraction of 45-50% with mid regurgitation of Tricuspid and pulmonary valves. CK-MB was 78. Trop-T was weakly positive. Patient was given Calcium gluconate and Anti-coagulants were started. Patient was managed by multi-disciplinary team and was weaned off the ventilator on 3rd Post-op day. She developed altered sensorium on 4th day. Her CT-Scan brain was normal and was reviewed by Psychiatrist. Her condition improved gradually and discharged on 5th October, 2021 at 10th Post Op day on oral anti-coagulants (Rivaroxiban) for 6 weeks. She and her baby are doing well on follow-up.

Conflict of Interests: none

Conclusion: Amniotic fluid embolism is rare but life threatening condition which can contribute significantly to high maternal mortality. Prompt identification, immediate resuscitation and intervention and multi-disciplinary team approach is the key to save precious maternal life.