# PP127 MATERNAL CARDIAC ARREST: PERIMORTEM CAESAREAN DELIVERY FAVOURING BETTER OUTCOME FOR BOTH MOTHER AND FETUS.

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#### **INTRODUCTION:**

Perimortem Caesarean Delivery (PMCD) and the 4 Minute Rule was first introduced by Katz, Dotters and Droegemueller back in 1986 as a resuscitative measure to improve survival for both the mother and fetus in maternal cardiac arrest. Since then, it has influenced multiple international guidelines and has been the stand of maternal resuscitation and fetal survival.

### **CASE PRESENTATION:**

A 31-year-old gravida-3 para-2 woman at 39-weeks of gestation collapsed in Emergency & Trauma Department, Hospital Sultanah Aminah Johor Bahru precipitated by Hypertensive Crisis with Acute Pulmonary Oedema. Cardiopulmonary Resuscitation commenced and a joint decision between Emergency and Obstetrician in charge was made to perform PMCD within 4 minutes and a female infant was delivered within 1 minute post incision with Apgar score of 1<sup>1</sup>/4<sup>5</sup>/7<sup>10</sup>. Baby was then intubated and was discharged well on day 16 of life. Mother achieved return of spontaneous circulation (ROSC) following PMCD and was admitted to ICU. She was discharged home on day 50 post-PMCD.

## **DISCUSSION:**

Timely intervention in regard to maternal physiological changes during pregnancy is crucial in improving the outcome of both mother and fetus during maternal cardiac arrest. PMCD can relief the aortocaval compression by gravid uterus thus improving venous return and efficacy of CPR as well as increase chest compliance to optimise CPR. Performing PMCD in our ETD has avoided the potential complication of unacceptable delay and interruption of CPR and has definitely contributed to the excellent prognosis of both as well. In our case, midline vertical incision was used instead of Joel-Cohen or Pfannenstiel incision.

#### **CONCLUSION:**

PMCD in maternal cardiac arrest of more than 20 weeks of gestation, if initiated within 4 minutes from arrested time, can improve both the maternal and fetal survival rate. To achieve this extremely narrow time frame require establishment

for rapid response from a coordinated team and readily available basic equipments for emergency cesarean delivery.