№ 125

Red Alert ! Here comes the adrenaline surge ! A case of perimortem caesarean section after traumatic arrest.

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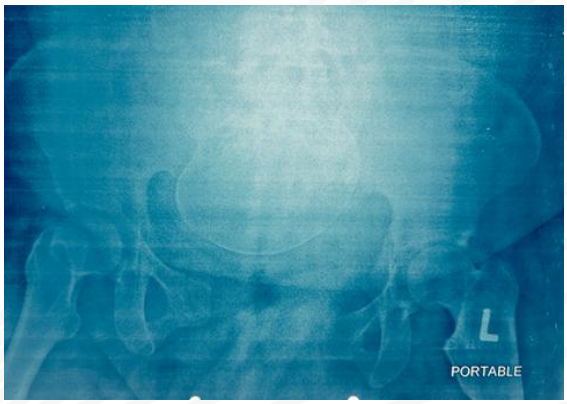
Introduction

Maternal cardiac arrest, particularly in the motor vehicle accident, is a rare catastrophic event that imposes huge challenges for effective resuscitation. In the presence of gravid uterus, perimortem caesarean delivery (PMCD) has been conducted as a measure of resuscitation for the maternal and fetal survival.

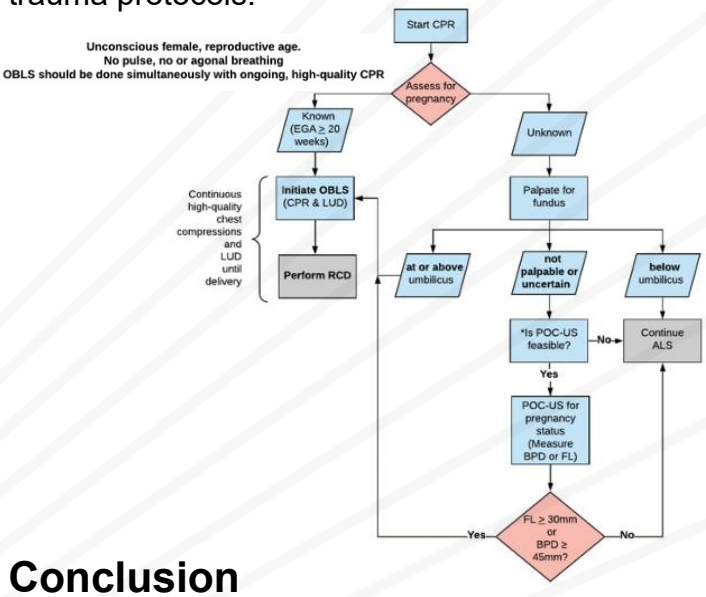
Case Description

We report a case of 26 years old G2P1 at 36weeks of gestation with antenatally diagnosed gestational diabetes mellitus and maternal obesity. Patient was a pillion rider involved in a high speed motor-vehicle accident. She was transferred to ED in a critical condition. Primary survey revealed signs of severe pelvic and intra-abdominal injuries in class III hemorrhagic shock. Bedside ultrasound assessment showed no fetal heart activity. Despite aggressive resuscitation by multidisciplinary teams, patient had deteriorated rapidly and progressed into sudden cardiac arrest. Red alert was activated and PMCD was performed bedside in attempt to revive the patient during cardiopulmonary resuscitation. However, all the resuscitative efforts were futile and the mother had eventually succumbed.



Discussion

Maternal traumatic cardiac arrest is a complex emergency requiring rapid, coordinated and obstetric specific resuscitation. Traumatic arrest algorithms such as the European Resuscitation Council's are widely used but lack specific guidance for possible pregnant patients. Interventions like manual left uterine displacement and PMCD are essential and time-sensitive. Incorporating the Obstetric Life Support (OBLS™) algorithm[1] into current guidelines along with rapid gestational assessment via physical examination or ultrasound is crucial. This assessment serves as a guide for deciding on PMCD, which is recommended within 5 minutes during resuscitation to improve maternal survival[2]. OBLS™ provides a holistic, evidence-based approach to address gaps in the existing trauma protocols.



Conclusion

This case highlights the necessity of pregnancy-specific resuscitation algorithm in the management of maternal traumatic arrest. The incorporation of OBLS™ protocols in traumatic arrest protocol ensures optimal resuscitation thus improving survival chance.

1. OBLS™ Traumatic Arrest Algorithm. Obstetric Life Support Course Materials. Society for Obstetric Anesthesia and Perinatology (SOAP), 2023.
2. Merchant et al., "Part 1: Executive Summary: 2020 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care," Circulation, vol. 142, no. 16, pp. S337-S357, Oct. 2020