

## [EngO2]English Session2

Chair:Fumimasa Amaya(Kyoto Prefectural University of Medicine, Japan)

Fri. Mar 1, 2019 2:00 PM - 3:00 PM 第11会場 (国立京都国際会館1F Room C-2)

### [EngO2-5]Extracorporeal cardiopulmonary resuscitation and damage control surgery for cardiac arrest due to postpartum hemorrhage

Kenshin Shimono<sup>1</sup>, Hirokazu Onishi<sup>1</sup>, Ryuji Sugimoto<sup>1</sup>, Chiyoka Kosaihiara<sup>2</sup>, Masato Kamitomo<sup>2</sup>, Takeshi Kodama<sup>3</sup>, Tsuyosi Ueno<sup>3</sup>, Junichiro Hamasaki<sup>3</sup>, Shohei Matsukubo<sup>1</sup>, Hideaki Yoshihara<sup>1</sup> (1.Department of Emergency and Critical Care Center, Kagoshima City Hospital, Japan, 2.Department of Obstetrics and Gynecology, Kagoshima City Hospital, Japan, 3.Department of Critical Care Medicine Kagoshima City Hospital, Japan)

【ライブ配信】

**BACKGROUND:** Cardiac arrest following a massive postpartum hemorrhage is a rare and catastrophic condition.

**CASE:** A previously healthy woman was transferred to our hospital because she developed a postpartum hemorrhage during cesarean delivery. She arrived with an open abdomen while uterus pressure was applied. She was intubated the moment she arrived at our emergency department. A 12 Fr triple-lumen dialysis catheter was placed in the right internal jugular vein to begin rapid infusion of red blood cells and fresh frozen plasma. Despite undergoing a massive transfusion, the patient collapsed and suffered cardiac arrest. In addition to cardiopulmonary resuscitation, we implemented resuscitative endovascular balloon occlusion of the aorta (REBOA) as a life-saving procedure to control the bleeding from uterus and maintain the blood pressure. However, the patient subsequently had multiple cardiac arrests that were eventually unresponsive to the above resuscitation methods, and she produced copious pink, frothy sputum that required continuous suctioning. Ultimately, she was resuscitated with extracorporeal cardiopulmonary resuscitation (ECPR) rather than REVOA. Following ECPR, a hysterectomy was performed, but diffuse microvascular oozing from the uterus and pelvic sidewalls occurred throughout the procedure. Hence, because the abdominal fascial layer was left open, we performed temporary abdominal closure with bag silo closure in compliance with the concept of damage control surgery. After the surgery, she was transported to the intensive care unit (ICU). We prescribed targeted temperature management to protect the brain in the ICU. She was stabilized, and her course was well tolerated with a planned return to the operating room for definitive surgery and decannulation of ECPR. Duration of extracorporeal membrane oxygenation was 39h, which yielded good results, and she was discharged from the ICU on the 8th hospital day with good cerebral performance.

**CONCLUSION:** Extracorporeal life support may be useful for resuscitation in case of cardiac arrest following a massive postpartum hemorrhage.