ISP-21-4 Interlocking of twins may cause malpresentation and malrotation of the vertex first twin: Four case reports of failed trial of labor

Kurashiki Central Hospital
Akihiko Ueda, Ken Fukuhara, Yu Inaba, Risa Takaguchi, Makiko Ikeda, Ayaka Yamamoto, Mamoru Shigeta, Shunsuke Kawahara, Akane Ueda, Takashi Nakahori, Tetsuko Honda, Masaaki Hasegawa

Failed trial of labor (TOL) in twin pregnancy has a high risk of complications for both mother and baby. After commencement of the active management protocol in October 2012, 64 twin TOLS were attempted, and 90.6% of cases achieved successful vaginal delivery at our facility. The current protocol consists of 1) induction of labor between 37 to 38 week's gestation, 2) artificial amniotomy after the engagement of the fetal head, 3) use of neuraxial analgesia, and 4) appropriate informed consent. Among 6 cases of failed TOL, cesarean sections were performed for both twins in 4 cases, and for the second twin in 2 cases. Herein we analyzed the 4 cases of failed TOL. All cases were primipara, and interestingly, failed TOL because of obstructed labor of the first twin. Induction of labor was performed for diamniotic twins with vertex–vertex (case 1–3) and vertex–transverse (case 4) presentation. In all cases, twin A was overridden by twin B and was in the occiput posterior position. Moreover, internal rotation of twin A was blocked by twin B, leading to obstructed labor. No deceleration of fetal heart rates was observed. Emergent cesarean sections were performed with good fetal outcomes. Interlocking of twins can cause malpresentation and malrotation of the vertex first twin. Monitoring the positional relation of twins may be important for early detection of obstructed labor.

ISP-21-5 Retrospective analysis of 27 cases transported from local clinic due to massive postpartum hemorrhage

Juntendo University Urayasu Hospital

[Objective] We analyzed cases transported from local clinic to our perinatal center due to massive postpartum hemorrhage. [Methods] From Jan. 2012 to Jul. 2015, we chose 75 cases who matched the criteria of postpartum hemorrhage defined by the Perinatal Committee in JSOG. Of which, we selected 27 cases who were transported from local clinic and analyzed cause of bleeding, conditions including shock index (SI) and outcomes of those patients. We got IC from these patients. [Results] In 27 cases, total amount of blood loss was estimated at 4871 ml and transfused RBC and FFP was 12.2 and 14.0U, respectively. Out of 27 patients, TAE and AHT was performed to 4 (15%) and 2 (7%) patients respectively. The most frequent case of bleeding was trauma to birth canal including vaginal and vulvar hematoma found in 8 (30%) cases. In these 8 cases, 6 (75%) cases were delivered with vacuum or forceps under epidural anesthesia. Before blood transfusion, we administrated colloid solution as early as possible. Consequently, average SI at the time of transportation and start of blood transfusion were improved from 1.22 to 1.08. [Conclusion] In a case of vacuum or forceps delivery under anesthesia, we should manage more carefully to prevent birth canal trauma. When a doctor in a local clinic encounters massive postpartum hemorrhage, colloid solution transfusion must be done as early as possible.

ISP-21-6 Transcatheter arterial embolization as first-line rescue in intractable primary postpartum hemorrhage: assessment, outcome, and subsequent fertility

Kaohsiung Chang Gung Memorial Hospital and Chang Gung University College of Medicine, Kaohsiung, Taiwan1, Department of Diagnostic Radiology, Kaohsiung Chang Gung Memorial Hospital and Chang Gung University College of Medicine, Kaohsiung, Taiwan2, Department of Emergency Medicine, Kaohsiung Chang Gung Memorial Hospital and Chang Gung University College of Medicine, Kaohsiung, Taiwan3
Hsin-Hsin Cheng1, Leo Leung-Chit Tsang2, Te-Yao Hsua1, Chia-Te Kung1, Chia-Yu Ou1, Ching-Di Chang2, Ching-Chang Tsai1, Yu-Fan Cheng2, Fu-Tsai Kunga1

[Objective] To assess the risk factors for intractable and controllable postpartum hemorrhage (PPH) and to evaluate the safety, efficacy and outcome of transcatheter arterial embolization (TAE) in treating intractable PPH. [Methods] An emergency PPH rescue system including the 24-hour available TAE was established in a geographic area with about 7 million people in 2004. TAE with gelatin sponge particles placed on bilateral uterine or internal iliac arteries served as the first-line treatment for intractable PPH. Delivery methods, parity, causes of bleeding, clinical vital signs, coagulopathy, success rate, resumption of menstruation, and subsequent pregnancy outcome after TAE were recorded and compared with the χ², student t-test and multivariate logistic regression analysis. [Results] From 2005 to 2013, 301 women experienced PPH of whom 178 had controllable PPH and 123 intractable PPH. Tachycardia and disseminated intravascular coagulation (DIC) were significant risk factors for intractable PPH. All of the women with intractable PPH underwent TAE, and 89 (73%) were transferred by ground transport from other clinics/hospitals to receive treatment in this system. The mean travel distance was 15±125 km. The mean time of order to angiography room was 94±142 minutes. The mean blood loss due to PPH before TAE was 2207±1882 ml (range, 900–1110 ml). First TAE successfully controlled bleeding in 118 of the 123 (95.9%) women with intractable PPH. Of the 70 women with complete followed up, 69 (98.6%) recovered menstruation. Twenty-three women tried to get pregnant after TAE and 19 (82.6%) of them became pregnant, giving birth to 12 term live infants. [Conclusion] TAE was safe and effective in treating intractable primary PPH with a high success rate and preservation of menstruation and fertility.