ISP-19-8  The effect of prophylactic cervical cerclage in triplet pregnancies

Okayama Medical Center, Okayama Red Cross Hospital
Moe Yorozu, Kazumasa Kumazawa, Kazumasa Tani, Satomi Yamashita, Satoe Kirino, Mizuho Yoshida, Noriko Katayama, Saya Tsukahara, Yoko Tateishi, Katsuhiko Tada

[Objective] to evaluate the effect of prophylactic cervical cerclage in triplet pregnancies. [Methods] This is a retrospective study of 29 triplet pregnancies from 2002 to 2014. There were five pregnancies with prophylactic cerclage and 24 pregnancies without prophylactic cerclage. We compared the perinatal outcome in two groups. [Results] The criteria of our management of triplet pregnancies is 1) hospitalization at 24th week of gestation, 2) not to perform prophylactic cerclage. Prophylactic cerclage were performed 5 cases (17%). In four cases, cerclage were suspended in our hospital and before patient were referred. Two of those were suspected of cervical infection and the cerclage were removed. In non–prophylactic cerclage group, rescue cerclage were performed in three cases. There is no significant difference in the mean gestational age at delivery, 35w5d in prophylactic cerclage group and 34w0d in non–prophylactic cerclage group. There are five (5.7%) perinatal morbidity. One was associated with multiple anomalies, other four cases were delivered between 24th and 28th week of gestation. [Conclusion] The prophylactic cerclage in triplet pregnancy may increase the risk of preterm delivery. The importance of the prevention of the preterm delivery in triplet pregnancy is realized again regarding to perinatal outcome with or without the cerclage.

ISP-19-9  Cervical SLPI expression during pregnancy is regulated by progesterone in mouse

The University of Tokyo
Taiki Samejima, Takeshi Nagamatsu, Toshio Nakayama, Takayuki Iriyama, Atsushi Komatsu, Kei Kawana, Yutaka Osuga, Tomoyuki Fujii

[Objective] Secretory Leukocyte Protease Inhibitor (SLPI) is a multifunctional secretory protein with anti–protease, anti–microbial and anti–inflammatory properties. We previously reported that cervical SLPI production increases during the progression of pregnancy. This study aimed to clarify the impact of progesterone on the regulatory mechanism of cervical SLPI expression. [Methods] Cervical SLPI expression was examined in a mouse model of preterm birth induced by a progesterone antagonist, RU486, in comparison with normal pregnancy. Additionally, the effect of the pharmacological blockade of steroid 5 alpha reductase type 1 (SRD5A1), a key enzyme of progesterone degradation, on cervical SLPI expression was analyzed. This study was conducted under the approval of ethics committee. [Results] In both normal pregnancy and the preterm birth model, cervical SLPI expression was significantly decreased at 24 h before delivery, whereas cervical SRD5A1 expression was elevated. SRD5A1 blockade maintained the expression of cervical SLPI and postponed the parturition possibly due to the impaired cervical ripening. [Conclusion] Our findings demonstrated SLPI expression at the cervix was influenced by progesterone metabolism. The reduction of cervical SLPI resulting from progesterone degradation by SRD5A1 might be a crucial step in cervical ripening prior to delivery.

ISP-20-1  Management of severe hypertension by nicardipine IV drip in pregnancy-induced hypertension after cesarean section

Nagoya City Medical Center, Aichi Medical University
Tomoe Nakagawa, Yoshikatsu Suzuki, Tamao Yamamoto, Ayano Matsuura

[Objective] In pregnancy–induced hypertension (PIH) patients, the hypotensive treatment is switched to IV drip such as nicardipine in postpartum after cesarean section (C/S). [Methods] Fifty one PIH patients, including 27 preeclampsia (PE) and 24 gestational hypertension (GH) were enrolled. They were divided into two of level I (160 ~ 179 mmHg) and level II (> 179 mmHg in systolic BP (SBP)). There was 23 PE and 14 GH in level I. After C/S, 1 to 6 mg/h of nicardipine was given by IV drip at 140~159mmHg for almost 2 days. The effective dose of nicardipine were evaluated. The changes on SBP were investigated focused on reascension. It was determined by transient increase in SBP > 160mmHg or daily average SBP > 160mmHg. This study was accepted by ethical committee. [Results] The stable dose was greater in PE (19 ± 6 mg/h) than that (15 ± 6 mg/h) in GH, even though most PE patients belonged to level I. Transient SBP reascension was seen in 39% PE and 38% GH in level I, while it was in 60% of GH in level II in spite of most patients (76%) taking oral administration. However, reascension of daily average SBP was seen in 13% of PE and 7% of GH in level I, while it was in 30% of GH in level II. In 2 of PE, IV drip was resumed. [Conclusion] In retrospective study, transient reascension was seen in about 40% of the patients, although reascension in SBP average was reduced.