Team Approaching for Pregnancy and Delivery in patients with Severe Coronary Arterial Lesions After Kawasaki Disease

Cho A. (1), Kamiyama H. (1), Kato M. (1), Watanabe H. (1), Komori A. (1), Abe Y. (1), Jinbo S. (1), Ayusawa M. (1), Takahashi S. (1) Takayama T. (2), Hirayama A.(2). Yamamoto. T(3). Sumitomo N.(4) Department of Pediatrics and Child Health, Nihon University School of Medicine, Tokyo, Japan(1); Department of Cardiovascular Medicine, Nihon University Graduate School of Medicine, Tokyo, Japan(2); Department of Obstetrics and Gynecology, Nihon University Graduate School of Medicine, Tokyo, Japan(3); Department of Pediatric Cardiology, Saitama Medical University, International Medical Center, Saitama, Japan(4);

[Objective] Management for pregnant female patients of Kawasaki disease (KD) with severe coronary arterial lesions (CAL) is recently closed up. Pregnancy is thought to have two problems to maintain anti-platelet effect. One is acceleration of coagulation, and the other is increased heparin clearance. Those problems are more serious for KD patients with CAL. The feasibility of continuous intravenous heparin administration (CIVH) for them is necessary to be evaluated.

[Method] We experienced 6 deliveries in 4 patients who switched oral aspirin to CIVH of 5-8 unit/kg/hour before delivery. Conferences with cardiologists, obstetricians and pediatricians including neonatologists were done for each case before and/or after their admission. Those medical records were summarized retrospectively.

[Results] Age of expecting female KD patients was 28.5 years in average. All patients had left CAL and two had right CAL also. Three of them had ischemic finding by scintigraphy and coronary CT angiogram before pregnancy. No patient was prescribed warfarin. Three of them were prescribed aspirin, but one of them and the other patient were lost to follow-up of our university hospital. They came back to follow-up at our hospital after they were aware of pregnancy. They admitted to our hospital 7 to 14 days before expected date, and spontaneous, vaginal delivery was indicated in 4 deliveries. In two cases decided to carry out Caesarian section at 38th gestational week. All patients discontinued aspirin after admission and at latest 7 days before delivery and started CIVH and restarted aspirin from 24 to 48 hours after deliver. In all cases, target of activated partial thromboplastin time (APTT) was controlled over 50 seconds. All 6 deliveries completed and newborns were all mature with no hemorrhagic complication. No KD patients developed any hemorrhagic or thrombotic complication.

[Discussion] APTT control longer than 50 seconds by CIVH is enough to warrant prevention of thrombotic event. Safe upper limit of APTT control without bleeding complication and the pros and cons of pregnancy in KD patients treated with warfarin are still two assignments. Team approaching should be achieved for appropriate management of the expecting patients with CAL after KD.