

JCK Poster

## JCK Poster 3 (III-JCKP3)

### Fetal and Neonatal Cardiology/Others

Chair: Han Zhang (Department of Cardiology, Shanghai Children's Hospital, Shanghai, China)

Sun. Jul 9, 2017 1:00 PM - 2:00 PM Poster Presentation Area (Exhibition and Event Hall)

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1:00 PM - 2:00 PM

### [III-JCKP3-01] Experience of cases demonstrating the difficulties in fetal TAPVC diagnosis

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#### Introduction:

We published an article showing that post LA space index (PLAS index) is useful in fetal diagnoses of TAPVC (Ultrasound Obstet Gynecol. 2014).

We report details of two cases (shown below), illustrating how PLAS index can be useful in addressing the difficulties in fetal diagnosis of TAPVC.

#### Case 1:

At 25 gestational weeks (GW), we performed a detailed fetal echocardiography because of suspected hypoplastic left heart syndrome. However, we diagnosed her as normal. She was born with SpO<sub>2</sub> 90% and admitted to NICU for tachypnea. On the 19th day, we diagnosed TAPVC (3) with pulmonary hypertension (PH). She showed PH crisis and underwent TAPVC repair on the 36th day. Postoperative course is good.

#### Case 2

At 25 GW, STIC images were analyzed by us and diagnosed as no abnormality. She was born with low SpO<sub>2</sub> of 80% and transferred to NICU. Then, we diagnosed TAPVC (3). One day after the birth, she underwent TAPVC repair. Since she developed pulmonary vein obstruction (PVO), PVO release surgery was performed 3 months later. Postoperative course is good.

#### Retrospective study:

Case 1: LA wall was smooth, PV flow was abnormal, PLAS index was 1.65 (> 1.27).

Case 2: PV flow of color doppler seemed to reflux to LA. There was abnormal blood flow going downwards behind LA. PLAS index was 1.48 (> 1.27).

#### Summary:

Case 1 developed PH crisis before surgery, and case 2 needed postoperative PVO release. Both cases may have been affected by 'postnatal' diagnosis. Retrospectively, since PLAS index was large in both cases, we believe that PLAS index is useful in fetal TAPVC screening.