

## MP1-20

### Outcome of arterial switch operation for Taussig Bing anomaly versus transposition of the great arteries and ventricular septal defect

Erek E. (1), Suzan D. (1), Yildiz O. (2), Aydin S. (1), Kirat B. (3), Kocyigit O.I. (3), Demir I.H. (4), Odemis E. (4)

Department of Cardiovascular Surgery, Acibadem University Atakent Hospital, Küçükçekmece, İstanbul (1);

Department of Cardiovascular Surgery, Mehmet Akif Ersoy Hospital, Küçükçekmece, İstanbul (2);

Department of Anesthesiology, Acibadem University Atakent Hospital, Küçükçekmece, İstanbul (3);

Department of Pediatric Cardiology, Acibadem University Atakent Hospital, Küçükçekmece, İstanbul (4)

**OBJECTIVE:** Patients with Taussig Bing anomaly (TBA) usually considered to have increased mortality and morbidity when compared to those with transposition of the great arteries and ventricular septal defect (TGA+VSD) after arterial switch operation (ASO). In this report we analyze our results in those patients.

**METHODS:** Between November 2010 and December 2015, 94 ASO was performed. Among them 36 patients (38,2%) had associated VSD and was diagnosed as TBA (n=14) or TGA+VSD (n=22).

Median ages were 17 days (range: 6-62 days) and 16 days (range: 2 days-7 months) respectively (p=NS). Six patients had aortic arch anomalies (coarctation n=4; interruption n=2) in TBA group (42,8%), while 3 patients had aortic coarctation in TGA+VSD group (13,6%) (p=0,11). Coronary anomaly was present in 3 (21,4%) and 6 (27,2%) patients respectively (p=NS). All VSDs were large in size and subpulmonary (except one with multiple VSD) in TBA group. Nevertheless VSDs were large in 14 (multiple VSD n=3) and moderate in 8 patients in TGA+VSD group. Only 1 patient had previous palliative surgery in TGA+VSD group. Besides ASO, VSD closures were performed via transneo-aortic approach in 10 patients with TBA. Others had transatrial approach. Pericardial patch was used in most of the patients except 7 patients who had moderate sized VSD, underwent primary VSD closure. One patient in each group had additional pulmonary banding because of multiple VSD or apical VSD.

**RESULTS:** Early mortality was 1 patient in TBA group and 2 patients in TGA+VSD group (mortality: 7,1% vs 9% respectively; p=NS). Delayed sternal closure was used in 85,7% and 72,2% respectively; p=NS). One patient needed ECMO support in each group. One of them (in TBA group) weaned and discharged uneventfully. Long duration of ventilatory support was necessary for 3 (21,4%) and 4 patients (18,1%) respectively (p=NS). One patient underwent permanent pacemaker implantation in TGA+VSD group. One patient in TBA group had VAC therapy due to mediastinitis.

**CONCLUSIONS:** Although the incidence of aortic arch anomalies is higher in TBA group, early and intermediate term outcomes are similar with TGA+VSD group.