

## MP3-11

### Arterial Switch Operation for Transposition of the Great Arteries with Intact Ventricular Septum in Infants Older than 21 days.

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**Introduction:** We have previously published that the primary arterial switch operation (ASO) is a feasible strategy for patients with transposition of the great arteries and intact ventricular septum (TGA-IVS) beyond age 21 days. We wanted to share our increasing experience in this study.

**Methods:** Between 2010 and 2017, 22 patients with the diagnosis of TGA/IVS whom ASO was performed after the postnatal 3rd week were evaluated retrospectively from the hospital data base. The demographic and echocardiographic features, cardiac catheterization findings were recorded. The timing and course of the operations, postoperative problems in the intensive care unit were evaluated.

**Results:** The median age of operation was 44 days (range 22-900days), median weight was 4 kg (range 2.3- 11 kg). 11 patients had severe cyanosis ( $SO_2 \leq 70\%$ ), 16 patients were receiving PGE1 infusion, and 7 patients were on mechanical ventilation at baseline. Balloon atrial septostomy was on 7 patients previously. Preoperative catheterization was performed on 10 patients. 15 patients were transferred to the intensive care unit with opened chest postoperatively. The median duration of mechanical ventilation, intensive care unit and hospital stay were 5 (range 2-33) days, 9.5 (range 3-48) days and 16 (range 7-57) days, respectively. 3 patients needed postoperative and one patient needed preoperative extracorporeal life support. There was no mortality.

Patients were grouped into 3 types according to the interventricular septum-left ventricular geometry on preoperative echocardiography. Type I: Interventricular septum (IVS) bulging into the right ventricle (9 patients), Type II: straightened IVS (7 patients), type III: IVS bulging in to the left ventricle (banana-shaped) (6 patients).

no	Age day	Sex	Weight (kg)	BSA (m <sup>2</sup> )	BAS	ASD	Cath	PDA	VSD type	SO <sub>2</sub> %
1	25	M	4,2	0,26	Y	Non-R	Y	0	Type 3	>70
2	25	M	4,0	0,22	N	R	N	0	Type 2	>70
3	45	F	3,1	0,2	Y	Non-R	N	0	Type 1	>70
4	43	F	4,0	0,23	N	Non-R	Y	0	Type 3	<70
5	125	M	5,4	0,29	N	R	Y	0	Type 2	<70
6	43	M	3,2	0,21	N	R	N	large	Type 1	>70
7	24	F	3,3	0,2	N	R	N	0	Type 1	<70
8	23	M	3,2	0,2	N	Non-R	N	large	Type 2	>70
9	60	F	4,6	0,24	N	Non-R	Y	0	Type 3	<70
10	40	M	4,5	0,25	N	Non-R	N	0	Type 1	>70
11	22	M	2,3	0,16	N	Non-R	N	large	Type 1	>70
12	43	F	3,4	0,2	N	R	N	large	Type 1	<70
13	26	F	3,6	0,22	N	R	N	0	Type 1	<70
14	55	M	4,4	0,23	Y	R	N	0	Type 2	<70
15	50	M	3,2	0,2	Y	R	Y	0	Type 2	>70
16	120	M	5,5	0,29	Y	R	Y	0	Type 3	<70
17	80	F	4,6	0,25	N	Non-R	N	large	Type 2	>70
18	900	M	11	0,52	N	Non-R	N	0	Type 2-3	>70
19	48	F	3,3	0,2	N	Non-R	N	0	Type 1	>70
20	28	F	3,2	0,2	N	R	N	0	Type 1	<70
21	55	M	4,4	0,23	Y	R	Y	0	Type 2	<70
22	58	M	4	0,25	N	Non-R	Y	med	Type 2-3	>70

**Conclusions:** Late arterial switch operation can be performed safely in patients with transposition of the great arteries and intact ventricular septum after a detailed evaluation and with an efficient, advanced, and suitable postoperative intensive care unit monitorization.

**Table 1: The demographic and clinical data;** F:Female, M:Male, BSA:Body surface area, BAS:balloon atrial septostomy, ASD:Atrial septal defect, VSD: Ventricular Septal defect Y:Yes, N:No