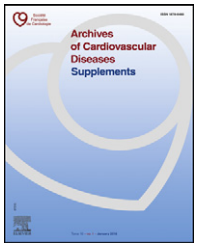
Archives of Cardiovascular Disease Supplements (2019) 11, e389—e393

Available online at
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com/en



Communications orales

Vendredi 13 septembre de 11h à 12h30

CO 7

Congenitally corrected transposition of the great arteries: Is it really a transposition?

Nicolas Arribard[1], Meriem Mostefa-Kara[2], Damien Bonnet[3], Sébastien Hascoët[1,*], Lucile Houyel[4]

[1] *Departement of congenital heart diseases, Hôpital Marie-Lannelongue, centre de reference cardiopathies congénitales complexes M3 C, Université Paris Sud, 92350 Le Plessis-Robinson*

[2] *M3C-Necker Enfants malades, AP—HP, Université Paris Descartes,Sorbonne Paris Cité, Paris, France*

[3] *Aix Marseille University, Center for Studies and Research on Health Services and Quality of Life, Public Health and Chronic Diseases Laboratory, 13007, Marseille, France*

[4] *Department of Congenital Cardiac Surgery, Marie-Lannelongue Hospital, Le Plessis-Robinson, France*

* *Corresponding author.*
E-mail address: s.hascoet@hml.fr (S. Hascoët)

Congenitally corrected transposition of the great arteries (ccTGA) associates atrioventricular discordance and ventriculo-arterial discordance. The anatomy of the associated ventricular septal defect (VSD) remains controversial.

We analyzed 102 human heart specimens: 31 ccTGA, 36 TGA, 35 normal hearts (NH), to compare the right ventricular septal anatomy between the 3 groups and to determine the anatomy of the VSD in ccTGA. VSD were classified as outlet if above the septal insertions of the tricuspid valve, inlet if underneath. We measured the lengths of the anterior (AL) and posterior (PL) limbs of the septal band, the angle between the two limbs and, in order to assess the orientation of the septal band, the angle between AL and the arterial valve above (AL-AV).

VSD was present in 26 ccTGA (83.9%) and was outlet in 16 cases (62%). Mean AL-PL angle was 76.4° (ccTGA) compared to 90.6° (TGA, $P = 0.011$) and 76.1° (NH, P = ns). Mean AL-AV was 70.6° (ccTGA) compared to 90.6° (TGA, $P = 0.0004$) and 69.1° (NH,P = ns). PL was significantly shorter in ccTGA: AL/PL length ratio 21.4 (ccTGA), 2.2 (TGA), 1.5 (NH), $P < 0.0003$.

Conclusion The typical VSD in ccTGA is an outlet VSD. Its frequent misdiagnosis as an inlet VSD is due to the short PL, which creates the illusion of a posterior VSD. Surprisingly, the orientation of the septal band is similar in ccTGA and NH, despite the atrioventricular discordance, and different in ccTGA and TGA, despite the ventriculo-arterial discordance. ccTGA is not a TGA and the term ''double discordance'' might be more appropriate.

Disclosure of interest The authors have not supplied their declaration of competing interest.

https://doi.org/10.1016/j.acvdsp.2019.06.019

CO 8

Impaired pulmonary function and its association with clinical outcomes, exercise capacity and quality of life in children with congenital heart disease

Hamouda Abassi[a,b,*], Arthur Gavotto[a], Marie Christine Picot[c], Helena Bertet[c], Stefan Matecki[f], Sophie Guillaumont[a,d], Stephane Moniotte[e], Pascal Auquier[b], Johan Moreau[a], Pascal Amedro[a,b,f]

[a] *Montpellier University Hospital, Paediatric and Congenital Cardiology Department, M3 C Regional Reference Centre, 34295, Montpellier, France*

[b] *Aix-Marseille University, Center for Studies and Research on Health Services and Quality of Life, 13007, Marseille, France*

[c] *Montpellier University Hospital, Epidemiology Department, Clinical Investigation Centre, Inserm—CIC 1411, 34295, Montpellier, France*

[d] *St-Pierre Institute, Paediatric Cardiology and Rehabilitation Unit, 34250, Palavas-Les-Flots, France*

[e] *St-Luc University Hospital, Paediatric and Congenital Cardiology Department, 1200, Woluwe-Saint-Lambert, Brussels, Belgium*

[f] *University of Montpellier, PhyMedExp„ Inserm, CNRS, 34295, Montpellier, France*

* *Corresponding author.*
E-mail address: hamouda-abassi@chu-monrpellier.fr (H. Abassi)

Background Impaired pulmonary function is an independent predictor of mortality in adult congenital heart disease (CHD), but has been scarcely studied in the paediatric CHD population.

Aims To compare the pulmonary function of children with CHD to healthy controls, and evaluate its association with clinical outcomes, exercise capacity, and quality of life.

Methods Cross-sectional multicentre study among 834 children (555 CHD and 279 control subjects) who underwent a complete spirometry and a cardiopulmonary exercise test (CPET). The 5th centile (Z-score = — 1.64) was used to define the lower limit of normal. The association of clinical and CPET variables with spirometry was studied using a multivariate analysis. Children and their parents filled in the Kidscreen health-related quality of life questionnaire.