Cardiology in the Young (2013), **23**, 626
doi:10.1017/S1047951113000103

Letter to the Editor

Left ventricular–right ventricular interaction in paediatric idiopathic dilated cardiomyopathy

Received: 28 November 2012; Accepted: 24 December 2012; First published online: 8 February 2013

To the Editor,

We read with interest the article "The role of right ventricular function in paediatric idiopathic dilated cardiomyopathy" from Groner et al.[1] In our opinion, this is a very interesting manuscript describing right ventricular systolic and diastolic dysfunction in children who suffer from idiopathic dilated cardiomyopathy. The authors state that there is also a need for detailed evaluation of the right ventricular function parameters, for example the tricuspid annular plane systolic excursion and the tricuspid annular peak systolic velocity, among these children.[1] They found that the tricuspid annular plane systolic excursion and the tricuspid annular peak systolic velocity were significantly lower in these patients than in the control group as a possible sign of relevant left ventricular–right ventricular interaction. Given the known left ventricular–right ventricular interaction in patients with tetralogy of Fallot[2] or dilated cardiomyopathy,[3] we support the notion of Groner et al[1] that right ventricular dysfunction is under-recognised in children with dilated cardiomyopathy. To be able to fully assess changes in systolic right ventricular function in patients with congenital heart defects, sufficient reference data of normal patients are required. For the convenience of the audience of Cardiology in the Young and especially for centres performing detailed echocardiographic investigations of the right ventricle, we want to add that our group has published normal tricuspid annular peak systolic velocity values with z-scores for healthy children.[4] In our opinion, the available z-scores will enable physicians to compare every single measured tricuspid annular plane systolic excursion and tricuspid annular peak systolic velocity value of patients with dilated cardiomyopathy to age-related normal z-score values. It would further be of interest to investigate the time point at which the decreased tricuspid annular plane systolic excursion and/or tricuspid annular peak systolic velocity values in patients with dilated cardiomyopathy will fall below the – 2 standard deviation, and whether values below – 2 standard deviation will correlate well with clinical worsening of these patients. We want to thank the authors for addressing the need for a careful and systematic evaluation of the right ventricle among children suffering from idiopathic dilated cardiomyopathy.[1] In our opinion, the right ventricular function should be carefully investigated in children and in adult patients with dilated cardiomyopathy with over time potentially decreased systolic right ventricular function.

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