Myocardial biopsies differentiate between myocyte- and endothelial-targeted myocarditis

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We appreciated the review of the current literature to paediatric myocarditis by Lindsay J. May et al (June 2011 issue). Regarding the evolving approach, we would like to underline the meaning of myocardial biopsies even in terms of the shift from coxsackievirus B to adenovirus and, in the past 5 years, to parvovirus B19.² In this context, we missed the pathogenetic features of inflammatory cardiomyopathy in terms of the fundamental difference between a coxsackievirus myocarditis and parvovirus B19 vasculitis-dependent cardiomyopathy, knowing well that endothelial cells but not cardiac myocytes are the Parvo B19-specific target cells in patients with Parvo B19-associated myocarditis.^{3,4} Taking this novel pathogenetic knowledge into account, the injury process of inflammatory cardiomyopathy is newly lightened. The question arises as to whether any newly diagnosed myocarditisdependent cardiomyopathy really has a pathogenesis, as reviewed by the authors, or is it time to use all current diagnostic tools to differentiate between a primary cardiac myopathy in which the myocytes are the primary targets and a vascular disease with secondary ischaemic cardiac myocytes damage? Such a differentiation makes sense not only in consideration of the prognostic difference between the causal viral entities, but also with respect to the current efficacy of gamma-globulin therapy and in particular to novel therapeutic strategies such as cardiac stem cell therapy.⁵

Dietmar Schranz Department of Paediatric Cardiology Justus-Liebig University Giessen, Germany

Ina Michel-Behnke Department of Paediatric Cardiology Medical University of Vienna Vienna, Austria

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Correspondence to: Dr Dietmar Schranz, Department of Paediatric Cardiology, Justus-Liebig University, Feulgenstrasse 12, 35385 Giessen, Germany; E-mail: dietmar.schranz@paediat.med.uni-giessen.de