time, should be excluded from primary cardiomyopathies in the current ESC classification, similarly to what is the case for ion-channel disorders.

References

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What do tachycardimyopathy belong to?: reply

We thank Dr Pieroni and colleagues for their response to the position statement from the ESC Working Group on Myocardial and Pericardial Diseases on the classification of cardiomyopathies. The authors’ main point is that it is inappropriate to classify left ventricular dysfunction caused by persistent atrial tachyarrhythmia (‘tachycardimyopathy’) as a primary cardiomyopathy. We agree. One of the major innovations of the ESC classification is the abandonment of the terms primary and secondary because of their arbitrary and inconsistent use in previous classifications.1 The exclusion of patients with myocardial dysfunction caused by coronary artery disease, hypertension, valve dysfunction, and congenital heart defects from the definition of cardiomyopathy could be criticized as being inconsistent with this philosophy, but it was the consensus view of the Working Group that reclassification of these established diseases as cardiomyopathies would be confusing and unlikely to be adopted in everyday practice. In the new classification system, tachycardimyopathy is simply a non-familial cause of dilated cardiomyopathy.

Reference

Tilt testing potentiated with sublingual nitroglycerin in children with unexplained syncope

We read with great interest the article by Foglia-Manzillo et al.1 on head-up tilt testing (HUT) with sublingual nitroglycerin in children with unexplained syncope. The authors concluded that nitroglycerin challenge greatly increased the positive rate of passive tilt with a small decrease in specificity. In our early studies with passive HUT, we observed that sensitivities of a test were 60% in children and 26% in adults.2 However, we noticed that the specificity of HUT in children is lower than in young adults (100 vs. 68%, respectively).3 The Italian Protocol is generally accepted as an investigation tool of unexplained syncope in adults.4 The question remains whether we should accept the same doses of nitroglycerin for adults and children (even those <8 years of age). The anthropometric characteristics (height, weight, and body mass index) or/and activity in sports should be factored into clinical investigation. Both body mass index and activity in sports may influence the tilt test results.5 Moreover, the optimal testing of a control group would demand longer follow-up to predict potential future syncope in up to 18 years. However, we realize that this may be very difficult in practice. Recently, the paper by Vlahos et al.6 questions the routine use of nitroglycerin in the evaluation...
Letters to the Editor

Tilt testing potentiated with sublingual nitroglycerin in children with unexplained syncope: reply

We really appreciate Dr Jastrzebska-Maj et al’s interest in our work, dealing with the diagnostic management of children with unexplained syncope.¹ Head-up tilt testing (HUT) potentiated with sublingual nitroglycerin (NTG) is an accepted examination in adults with unexplained syncope, but, so far, very few studies assessed the diagnostic value of this test in children.²,³

In our study, we evaluated a sublingual NTG–HUT protocol in children aged 5–17 years. We found a 63% positivity rate, similar to that reported in adults, and an 86% specificity, similar to the 91% reported by Dindar et al.⁴ On the contrary, Vlahos et al.⁵ found a lower 67% specificity. As stated by Dr Jastrzebska-Maj et al., these contrasting results may be because of differences in HUT protocols and different inclusion criteria in study populations. Indeed, some patients’ characteristics, such as obesity and regular resistance training, may influence the HUT specificity. Moreover, also the utilization of intravenous cannulation may significantly affect the HUT specificity, especially in children.⁶ In order to reduce the influence of these factors, we did not utilize invasional instrumentation and enrolled only sedentary children with normal weight for age.

Another important issue in the evaluation of HUT diagnostic value remains the high prevalence of neurally mediated syncope in children, which may influence HUT specificity. Indeed, a ‘false’ positive response in healthy control subjects might represent a true susceptibility to clinical neurally mediated syncope.⁷ Nevertheless, if we excluded our control subject, who had spontaneous syncope on follow-up, in our study, the HUT specificity would increase from 86 up to 89%. Thus, in our opinion, this potentially confounding variable may not really affect the diagnostic and clinical value of the test.

Finally, Dr Jastrzebska-Maj et al. question whether it is acceptable to utilize the same dose of sublingual NTG for both adults and children. However, the 86% specificity that we found also in younger children (aged ≤8 years) may prove that the NTG–HUT outcome is not correlated to patients’ body weight. Moreover, in our study, NTG was very well-tolerated in children, both in patients and in control subjects.

Thus, we believe that utilizing a fixed spray dose of sublingual NTG allows us to perform a simple and well-accepted test also in children.

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doi:10.1093/eurheartj/ehn095
Online publish-ahead-of-print 12 March 2008

Glucose, insulin, and coronary heart disease

It has been reported that higher plasma glucose levels after acute myocardial infarction (AMI) predict higher mortality in non-diabetic and diabetic patients since glucose is pro-inflammatory and insulin has anti-inflammatory actions. The beneficial actions of insulin has been attributed to its inhibitory action on tumour necrosis factor-α (TNF-α), macrophage migration inhibitory factor (MIF),...