overall mortality (secondary endpoint). Previous meta-analysis failed to prove the effects of CRT alone on survival because trials that also included patients receiving a CRT with an added defibrillator function were also considered in their analysis. As it is highly unlikely that a trial comparing the effects of CRT alone with optimal medical therapy will ever be conducted, it was our purpose to attempt to give a definitive estimation of the effects of CRT on overall mortality in this specific patient population. The message of this meta-analysis is that there is enough evidence to strongly support CRT as a class I indication to improve survival in this selected group of patients with advanced systolic heart failure. Whether the level of evidence supporting the recommendation to implant CRT devices should be A instead of B is probably more dependent on the definition used by the task force working group (some task forces only consider multiple randomized clinical trials and not meta-analyses as level of evidence A).

The second reason for conducting this meta-analysis was to evaluate in what way CRT affects the mode of death. Probably, no randomized clinical trial will ever be conducted for the purpose of answering this question. We think, as the CARE-HF investigators showed, that the positive effect of CRT on mode of death is probably time (remodelling)-dependent. Our meta-analysis showed that CRT did not affect the incidence of sudden cardiac death (SCD) during the follow-up covered by it (18.4 months). Nonetheless, CRT modified the mode of death, increasing the proportion of SCD relative to other modes of death. After long-term treatment, CRT probably also reduces the incidence of SCD; however, the proportion of patients dying suddenly remains high and the use of a combined CRT device with defibrillator function, when indicated, is warranted.

References


Maximo Rivera-Ayerza
Erasmus Medical Center
Cardiology Department
Dr Molewaterplein 40
3015 GD Rotterdam
The Netherlands
E-mail address: m.riveroyayerza@erasmusmc.nl
Luc Jordans
Cardiology Department
Erasmus MC, Rotterdam
The Netherlands

doi:10.1093/eurheartj/ehm098
Online publish-ahead-of-print 30 April 2007

The chronic heart failure is not so frequent in non-compaction

Isolated and associated non-compaction of the left ventricle is an uncommon cardiomyopathy, with an unclear natural history.1–3 Some authors described a bad prognosis for this disease.1,2 Instead, other published works, such as the Lilje’s1 work published in European heart journal in August, with a longer follow-up and with a larger cohort, reported a medium-term good prognosis. Correlated with the prognosis is the ventricular dysfunction.

During this last year, we collected more than 230 patients in the Italian society of cardiovascular ultrasound registry. The incidence of chronic heart failure (EF < 45%) in our experience was around 50%. However, an important bias influences these data: all patients enrolled in a hospital division, where, in a large percentage, were admitted for symptoms. So the analysed population is a selected population. To demonstrate this hypothesis, we studied all first-degree relatives of 31 patients. In total, we observed 48 relatives affected by non-compaction. Of the total patients, 61% (19/31) presented an EF reduction, whereas of the relatives, only 2% (1/48) presented an EF reduction.

In our opinion, high incidence described by Lilje et al.1 of ventricular dysfunction is a consequence for a selected cohort.

References


Giovanni Fazio
Department of Cardiology
University of Palermo
Via Santa Maria di Gesu’ 25
90124 Palermo
Italy
E-mail address: Giovanni.fazio-aaa@poste.it

Loredana Sutera
Department of Cardiology
University of Palermo
90124 Palermo
Italy

Giovanni Corrado
Department of Cardiology
Valduce Hospital
Como
Italy

Salvatore Novo
Department of Cardiology
University of Palermo
90124 Palermo
Italy

doi:10.1093/eurheartj/ehm099
Online publish-ahead-of-print 30 April 2007

The chronic heart failure is not so frequent in non-compaction: reply

We appreciate the interest of Fazio et al. in our paper. We agree with their valuable comments in many regards.

1. Prognosis. Presumably by accident, Fazio et al. cited our data as describing both a bad and a good prognosis. In fact, we do consider the outcome concerning. At 12 months follow-up, the occurrence of congestive heart failure (CHF), arrhythmias, and thrombo-embolic events was 68.0, 20.0, and 13.9%, respectively. The mortality was 7.1%.1 These figures are even higher in several other studies.

2. CHF. The incidence of CHF in the population studied by Fazio et al. was 50–61%. These data are likewise concerning. They support our and previous findings of a high incidence of CHF in non-compaction of the left ventricular myocardium (NVCN), as do additional recent studies.2,3 We discussed several theories and findings explaining why NVCN may lead to CHF.1 Further data have since been published in support of this discussion.3

3. Selection bias. As mentioned within the paragraph ‘study limitations’ of our paper, our population—like the one studied by Fazio et al.—was undoubtedly prone to a referral bias of a tertiary care medical centre. However, not all patients were symptomatic. We evaluated all consecutive