The cardiac cell: its survival and performance

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In 1996, a triumphant editorial in *Science* by Brown and Goldstein, Nobel Prize winners for their brilliant work on the role of low-density lipoprotein (LDL) receptor in cholesterol regulation, proclaimed the possible ''end of coronary disease . . . early in the next century''. Yet, nearly 16 million people are living with coronary heart disease and nearly half a million die from it each year, in the United States of America alone.

It is time to stop giving the message that ''we are winning the war on heart disease''; in fact, we are now starting to lose the battle against heart disease. All recent trials and meta-analyses in ischemic heart disease (IHD) consistently conclude that available treatments, including coronary revascularization procedures, have a limited impact, if any, on morbidity and mortality.

The 30 November 2009 issue of the *Forbes Asia* finance magazine published an article entitled ''Useless Medicine'', listing treatments that are of no help, increase costs, and may even cause harm. Coronary angioplasty and stents, high-tech cardiac imaging, and investigation of fainting spells topped the list.

Indeed, there is extensive evidence that the gains against mortality from IHD that were observed in many countries from 1965 to 2000 were overwhelmingly the result of improvements in population levels of risk factors, rather than being attributable to invasive procedures or new medications.

These rather bitter-tasting considerations would deserve an in-depth analysis that is beyond the scope of this Editorial. Nevertheless, I cannot but remark how excessive appears the emphasis in current medical literature on *coronary artery disease*, as opposed to *ischemic heart disease*.

Many Cardiologists seem to use these terms as if they were synonymous, dramatically underestimating the complexity and multiplicity of factors that can precipitate IHD, and forgetting that coronary artery disease is but one of these factors, because coronary artery disease per se is not necessary or sufficient to cause IHD.

This Special Anniversary Issue of *Heart and Metabolism*, fully consistent with the editorial strategy of the Journal since its foundation, focuses on the ''heart'' of the matter: the cardiac cell, its survival, and its performance.

It is my privilege to introduce readers to a remarkable collection of papers reporting on key aspects of cardiac cell function and metabolism in a variety of clinical conditions, including acute coronary syndromes, cardiomyopathy, and diabetes. They are the product of the combined effort of the Editorial Board of the Journal.

I do not wish to summarize here the content of each article, but I can assure you, the reader, that they all represent a state-of-the art paper and merit your full attention . . .and I do happen to share the concepts they express.

Enjoy your reading!