Prologue

“Cardiovascular Endocrinology, a new dimension in Medicine”

Sir—From daily clinical practice we are aware that only about 40% of all cardiovascular events can be explained by the classical cardiovascular risk factors (such as hypertension, dyslipidaemia, and obesity). In line with James Parle and colleagues’ report (1) additional pathophysiological mechanisms need to be investigated, especially in relation to hormonal disturbances.

We have noted increased concentrations of highly atherogenic lipoprotein remnants in active acromegaly (2). Moreover, premature atherosclerosis is a clinical feature in adult-onset growth hormone (GH) deficiency syndrome. We have reported an improved postprandial atherogenic lipoprotein remnant profile and endothelial function after GH substitution (3).

Bengtsson and Johansson (4) summarised the beneficial effects of GH therapy on early atherosclerotic changes in GH-deficient adults. The cardiovascular importance of the GH/insulin-like growth factor (IGF) axis and the efforts to treat disturbed activity is a further example of endocrinological intervention in cardiovascular disease. Scientific progress has been made in this area, in which left-ventricle dysfunction improved after chronic subcutaneous Ghrelin administration in a rat model (5). Ghrelin in treatment of chronic heart failure in men may, therefore, become an option in the future.

Concordant with effects of disturbed activity of the GH/IGF axis in cardiovascular function, we postulate that other disturbed hormonal systems will have an effect on cardiovascular disease. Of course, this hormonal–cardiovascular interaction needs to be studied more thoroughly. We believe these developments support the importance of a new multidisciplinary approach, which may create a new dimension in medicine—cardiovascular endocrinology.

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