

Cardiometabolic medicine: time to recognize a new clinical specialty?

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Cardiovascular Endocrinology & Metabolism 2019, 8:47–48

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Received 5 April 2019 Accepted 8 April 2019

Diabetes, of which type 2 diabetes accounts for approximately 90% of cases, is a major preventable risk factor for cardiovascular disease that has reached pandemic proportions [1]. The presence of diabetes compounds the effects of other risk factors to increase the probability of vascular disease. Type 2 diabetes escalates the threat of heart failure, worsens the clinical course of cardiovascular diseases and shortens life expectancy albeit with variations in risk between subgroups of patients [2,3]. Although hospitalizations for acute myocardial infarction in western countries have declined in recent decades [4] diabetes continues to confer excess modifiable cardiovascular morbidity and premature mortality [5]. Encouragingly from a therapeutic standpoint, a recent study demonstrated that patients with type 2 diabetes who had five risk-factor variables within the target ranges appeared to have little or no excess risk of death, myocardial infarction, or stroke compared to the general population of Sweden [5].

The associations between obesity-associated type 2 diabetes, atherosclerotic cardiovascular disease, nephropathy and heart failure are considered to reflect shared risk factors that may operate via complex and multidirectional pathophysiological pathways [6–8]. On the basis of epidemiological studies and interventional clinical trials it has been established that effective management of type 2 diabetes requires effective and safe control of hyperglycaemia along with attention to other risk factors – notably hypertension and lipoprotein abnormalities – that cluster as the metabolic syndrome [9]. In contrast, as recently reviewed in a special issue of *Cardiovascular Endocrinology & Metabolism*, the evidence base for reducing cardiovascular disease in patients with type 1 diabetes [10] remains less robust [11].

The possibility of recognizing a new and distinct cardiometabolic subspecialty has been the subject of increasing discussion among clinicians involved in the care of patients with diabetes and cardiovascular disease. In this issue of *Cardiovascular Endocrinology & Metabolism*, Professor David Taylor of the University College London considers aspects of the association between diabetes and cardiovascular disease and sets out a case for closer integration between the specialties of endocrinology and cardiology [12]. In considering the science policy argument,

he concludes there is a strong case in favour of researchers and clinicians working in the field of ‘cardiometabolic medicine’ collaborating more closely; he predicts clinical benefits from more effective integration of these disciplines. This view echoes those of prominent clinicians who believe that a new subspecialty of cardiometabolic medicine would be driven by both scientific and clinical rationale. The latter point recognizes the increasing populations of patients with obesity-associated diabetes and ageing populations with high rates of cardiovascular disease in support of a less siloed approach to management.

Cardiologists are increasingly aware of the importance of diabetes to their clinical practice [13]. Patients with diabetes are over-represented in cardiology clinics and coronary care units [14]. In addition to the high prevalence of diagnosed diabetes in patients with either acute or stable cardiovascular disease many more patients have undiagnosed dysregulated glucose metabolism [15]. On a positive note, new pharmacotherapeutic opportunities for reducing atherosclerotic cardiovascular disease events and heart failure have recently become available that have changed the therapeutic landscape [16]. Although optimal positioning of sodium–glucose cotransporter-2 inhibitors and glucagon-like peptide-1 receptor agonists awaits further clarification [17] clinical practice guidelines have been revised [18] and diabetes and cardiology expert groups are collaborating to raise awareness (<https://knowdiabetesbyheart.org/about-the-initiative/>). In the context of multiple risk factor management, clinicians must also be aware of the potential for certain cardioprotective medications to induce or aggravate adverse metabolic profiles [19,20].

Bringing clinicians and researchers in endocrinology and cardiology together was the foundation for *Cardiovascular Endocrinology & Metabolism*. From its inception as *Cardiovascular Endocrinology* [21] the journal is pleased to have forged affiliations with a number of highly regarded professional organizations during its evolution. These include the International Society for Hypertension; the Lipids, Metabolism & Vascular Risk section of the Royal Society of Medicine; and the European Group for the study of Insulin Resistance which was recently recognised as a Study Group of the European Association

for the Study of Diabetes. These affiliations reflect the wide range of endocrine and metabolic disorders associated with an elevated risk of cardiovascular disease [22]. *Cardiovascular Endocrinology & Metabolism* is a member of the HEART Group of medical journals.

The journal hopes to contribute to the dialogue between endocrinologists and cardiologists by assembling evidence on the intersections between endocrinology, metabolism and cardiovascular health. Senior clinicians and investigators will be invited to review the relevant data and to offer their perspectives. In parallel, we intend to explore the potential for a professional accreditation scheme that would recognize a new clinical specialty focussed on cardiometabolic medicine. We would be pleased to hear from any clinicians or researchers interested in contributing to this initiative.

Acknowledgements

Conflicts of interest

There are no conflicts of interest.

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