Ischemic Heart Disease in Women: Not About Religion

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Over the past 40 years impressive progress has been made in treating focal, obstructive coronary artery disease (CAD) using percutaneous coronary interventions (PCI) and the most sophisticated surgical bypass techniques. Although women have profited to a great extent from these advancements, sex and gender differences in ischemic heart disease (IHD) are still under-recognised and even ignored in clinical practice. The majority of women with signs and symptoms of IHD are still treated using standards for men. However, this is not in line with the different pattern of IHD in women, with non-obstructive CAD (NOCAD) predominating over obstructive CAD, in combination with functional disorders of the coronary (micro-) circulation. Postmortem studies and computed tomography angiograms show clinically relevant sex differences in plaque morphology at all ages, with fewer calcifications, less focal obstruction and a more diffuse pattern of atherosclerosis with ‘outward remodeling’ and ‘soft’ plaques in women compared with men. Differences in underlying pathophysiology lead to a more distinct presentation of angina symptoms and warrant a more gender-sensitive diagnostic and therapeutic approach than the usual male-oriented diagnostic pathway.

In this edition of European Cardiology Review, several experts provide an excellent overview of our current knowledge on cardiovascular disease – both in women in general and in women after complicated pregnancies. Furthermore, the paper of Michelsen et al. is very helpful in identifying the most appropriate diagnostic tools to assess NOCAD with or without functional coronary (micro-) vascular disease in symptomatic women. It is a must read for all professionals working in the field of clinical cardiology.

A Culture Shift is Needed in Cardiology

After 40 years of angioplasty, with the development of advanced stents and antithrombotic therapy, it is time to move on and reconsider our patient population. This population is made up of males and females with various ethnic backgrounds and differences in phases of life, risk factors, stress-levels, cardiac and non-cardiac co-morbidities, inflammatory diseases and genetics, and these differences must be taken into consideration in order to provide more tailored care for the broad spectrum of existing IHD manifestations. This needs a cultural change within the cardiology community for whom a specific interest in IHD in women has not been a priority in the past. Our current cardiac care is indebted to women to provide the best possible treatment for IHD. In the US, an alliance of experts has recently established a research agenda for non-obstructive IHD that is equally relevant to our European populations. To accelerate improvements, we also need to consider ‘health’ along a horizontally oriented life-course and leave our vertical organ-specific way of thinking behind. Past events such as preeclampsia have serious consequences for future cardiovascular
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Disease risk in women, and adequate follow-up requires close collaboration of cardiologists/vascular specialists with obstetricians. Benefits for patients should take precedent, with a shift away from outdated ways of thinking.


5. Michaelsen MM, Mygind MD, Frestad D, Prescott E. Women with stable angina pectoris and no obstructive coronary artery disease: closer to a diagnosis. European Cardiology Review 2017; XXXXXX


