Evidence of sex differences has inspired worldwide sharing of research results

CARDIOVASCULAR disease (CVD) in women is different from CVD in men. Women are more likely to die from myocardial infarction (MI) while in hospital than men, and are more likely to develop a fatal arrhythmia from cardiac drugs.

These were among the topics discussed at the 2016 International Menopause Society’s 15th World Congress on Menopause, in Prague in September.

Themed Heart Matters, the congress focused on female cardiac health. CVD is the number-one cause of mortality of post-menopausal women (PMW) in the western world, a fact that has galvanised clinicians and researchers worldwide to seek answers and share results.

The congress heard evidence about the fundamental biological differences between male and female vascular functionality, a subject only starting to be understood.

When women present with chest symptoms, they are less likely to have appropriate cardiac investigations performed than men and less likely to receive appropriate treatment early.

A French study showed that following MI women are 2.5 times more likely than men to die in hospital.

An angiogram performed on a woman will often show no coronary artery occlusions. The vessel changes are in the arterial wall, with plaque erosions under the endothelial surface, or the vessel wall dissects, rather than thrombosis within the vessel lumen. Coronary artery vasospasm is more likely in women than men.

I have summarised the research that particularly took my interest at the congress. It is worth noting that all abstracts are available for download from the IMS website.

HOT TOPIC

Different presenters used the interchangeable terms menopausal hormone therapy (MHT), hormone replacement therapy (HRT) or simply hormone therapy (HT).

The MHT timing hypotheses was a hot topic. It is known that a younger patient may have a risk reduction of MI and overall cardiac events when prescribed MHT, whereas older patients may have increased risk.

MHT is prescribed safely within 10 years of the final menstrual period, or between 50 and 60 years of age.

Research showed that there were fewer cardiac deaths before age 60 in women on MHT.

The earlier the therapy was commenced, the lower the cardiac mortality rates. Hence the timing hypothesis is gaining favour compared with the window-of-opportunity hypothesis.

One researcher called for renewed analysis of randomised clinical trials on HRT and cardio protection to identify women who may benefit from its use and those in whom it is contraindicated.
The results of a Japanese study showed coronary artery stenosis and calcification seemed to start 10 years earlier in men than in women, but with peripheral atherosclerosis progression there was no significant sex difference. The study identified differences between the sexes in atherosclerotic changes of coronary and peripheral arteries preceding CVD.

Further research needs to elucidate the female prevalence of sub-endocardial MI, spontaneous arterial dissections, plaque erosions and a higher rate of vaso-spastic disorders.

A team from Italy analysed CVD risk factors (CVDRF) such as prior obstetric, reproductive endocrine and rheumatic disorders in climacteric women. They found these disorders could significantly accelerate CVD development.

These studies will arm health professionals with information that can lead to better education about CVD sex differences and development of preventative health policies.

The body of studies suggest that HRT, or more specifically oestrogen replacement therapy, is associated with beneficial cardiovascular effects in early postmenopausal women.

The multitude of biological effects that may account for apparent CVD protection from oestrogen therapy include positive effects on the lipid profile, antioxidant activity, enhanced fibrinolysis, and actions on the vasculature.

There is evidence from the literature that early menopause itself is a risk factor for CVD and that early onset of oestrogen replacement therapy might have a role in delaying the atherosclerotic process in postmenopausal women.

SCREENING
Emerging data has linked vasomotor symptoms with markers of CVD risk, especially in women with some degree of CVD risk-factor burden.

Vasomotor symptoms correlate with CVD and therefore symptomatic women should be regularly screened for the disease.

GPs and health professionals are well-placed to instigate discussions with women to encourage them to live a heart-healthy lifestyle before they reach midlife. Obesity, sedentary behaviour and poor diet can all be addressed using a multi-disciplinary team approach.

PATIENT RESOURCES
Heart Age Calculator: www.world-heart-federation.org/cardiovascular-health/heart-age-calculator

References at medobs.com.au

*Dr Farrell is also Adjunct Honorary Senior Lecturer in the Department of Obstetrics and Gynaecology, Monash University and was past president of the Australasian Menopause Society and also of the Asia Pacific Menopause Federation

This column is supplied by Jean Hailes for Women’s Health - a national, not-for-profit organisation focusing on clinical care, innovative research and practical educational opportunities for health professionals and women. www.jeanhailes.org.au

Practice points

- MHT is prescribed safely within 10 years of the final menstrual period (or at 50-60 years of age)
- Screen women with vasomotor symptoms regularly
- CVD may be accelerated in women with prior obstetric, reproductive endocrine and rheumatic disorders
- Women are 2.5 times more likely than men to die in hospital following MI