2.4 CARDIOVASCULAR AND DIABETES

Chair: Dr Maria Ines Schmidt, Brazil

02-4.1 LONG TERM CARDIOVASCULAR RISK IN WOMEN WITH PRE-ECLAMPSIA: SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction There is increasing evidence that pre-eclampsia, a principal cause of maternal morbidity, may also be a risk factor for future cardiovascular and cerebrovascular events. This review aimed to assess the current evidence and quantify the risks of cardiovascular and cerebrovascular events that may follow a diagnosis of pre-eclampsia.

Methods MEDLINE and EMBASE were searched with no language restrictions, as were core journals and reference lists from reviews. Case control and cohort studies which reported cardiovascular and cerebrovascular diseases diagnosed more than 6 weeks postpartum, in women who had history of pre-eclampsia relative to women who had unaffected pregnancies, were included.

Results 24 articles were included in the systematic review and 19 in the meta-analysis. Women with a history of pre-eclampsia or eclampsia were at significantly increased odds of fatal or non-fatal cardiovascular disease (OR 2.27, 95% CI 1.83 to 2.82) and cerebrovascular disease (OR 2.46, 95% CI 1.57 to 3.85). Among pre-eclamptic women, pre-term delivery was not associated with an increased risk of a future cardiovascular event (RR 1.28, 95% CI 0.82 to 1.99).

Conclusion Women diagnosed with pre-eclampsia are at increased risk of future cardiovascular or cerebrovascular events, with an estimated doubling of risk compared to unaffected women. This has implications for the follow-up of all women who experience pre-eclampsia, not just those who deliver pre-term. This association may reflect shared common risk factors for both pre-eclampsia and cardiovascular and cerebrovascular disease.

02-4.2 IS THE IMPACT OF HEALTH LIFESTYLE BEHAVIOURS ON CARDIOVASCULAR MORTALITY MODIFIED BY PARENTAL HISTORY OF CARDIOVASCULAR DISEASE?

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Introduction We examined whether the association between lifestyle behaviours and cardiovascular disease mortality is modified by parental history of CVD.

Methods The survey cohort was a total of 52,606 subjects (22,278 men and 30,328 women) aged 40~79 years from 1988 to 1990 were followed-up until the end of 2006. Paternal, maternal, both of parental, and either/both of parental histories of heart disease and/or stroke were defined as parental histories of CVD. We used the healthy lifestyle score (fruits ≥1/day, fish ≥1/day, milk almost every day, exercise≥5 h/w and/or walking≥0.5 h/day, BMI 21~25 kg/m², Ethanol intake:≤46.0 g/day, non-smoker, and sleep 5.5~7.5 h/day, ranged 0~8) to evaluate the lifestyle status.

Results During the 14.2 median years of follow-up, there were 3284 deaths from total CVD (1706 men and 1578 women). Compared with people without parental history of CVD, those with it showed 9%~25% increased risk of mortality from CVD. However, the association between lifestyle behaviours and the mortality from CVD did not vary materially by parental history of CVD. The respective multivariable HRs (95% CI) in highest lifestyle score category compared to lowest were 0.55 (0.45 to 0.68) for either/both of parental histories of CVD and 0.50 (0.30 to 0.64) for those without it in men, and 0.65 (0.54 to 0.79) and 0.63 (0.49 to 0.81) in women.

Conclusions Lifestyle modifications may be important for both people with or without parental histories.
O2-4.1 Long term cardiovascular risk in women with pre-eclampsia: systematic review and meta-analysis
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