

SMFM 2009: Hypertension in Pregnancy Increases Risk for Subsequent Morbidity

Hypertensive disorders during pregnancy are associated with an increased risk for subsequent chronic hypertension, thromboembolism, and type 2 diabetes, according to the findings of a large cohort study.

Gestational hypertension and pre-eclampsia have already been associated with a high risk for maternal ischemic heart disease and mortality, but little research has been done on their relation to other types of cardiovascular outcomes and diabetes.

To our knowledge, this is the first study to describe the risk gradient of subsequent thromboembolic events in women who experience hypertension during pregnancy.

The researchers conducted a registry-based retrospective cohort study of nearly 1.4 million women who had delivered 1 (n = 782,287) or 2 (n = 536,419) singleton children in Denmark between 1978 and 2007. The women were followed for 13 to 15 years. Women with a history of diabetes (type 1 or 2) were excluded from the analysis.

The presence of gestational hypertension did not significantly increase the risk for subsequent thromboembolism. However, even mild pre-eclampsia was associated with a hazard ratio for thromboembolism of 5.1. With severe pre-eclampsia, the hazard ratio was 6.9 ($P < .001$ for both). When it came to type 2 diabetes, gestational hypertension and mild and severe pre-eclampsia were all associated with a significant increase in risk. The hazard ratio associated with each condition was 3.32, 3.53, and 3.68, respectively, compared with women who did not develop any hypertensive disorder ($P < .001$ for each).

Society for Maternal-Fetal Medicine (SMFM) 29th Annual Meeting: Abstract 10. Presented January 29, 2009.