

Adverse Pregnancy Outcomes Are Associated with Future Cardiovascular Risk

Hypertensive disorders of pregnancy and low birth weight carry the greatest risk.

Investigators have previously found an association between adverse pregnancy outcomes and future cardiovascular risk. To confirm an association between atherosclerotic cardiovascular disease (ASCVD) in postmenopausal women and a history of adverse pregnancy outcomes, the authors performed the current study. They analyzed data from the Women's Health Initiative longitudinal cohort study, which included a survey eliciting participants' history of gestational diabetes, hypertensive disorders of pregnancy, low birth weight (<2.49 kg), high birth weight (>4.08 kg), and preterm delivery (≥ 3 weeks). The investigators also controlled for traditional cardiovascular risk factors.

Of the 46,805 women who returned the survey (median age, 60; 5% Black and 2% Hispanic), 28.8% reported at least one adverse pregnancy outcome; ASCVD appeared to be more frequent in women with an adverse pregnancy outcome than in those without (7.6% and 5.8%). Individually, each of the adverse pregnancy outcomes was significantly associated with ASCVD, except high birth weight. In a model that analyzed all adverse pregnancy outcomes together, only hypertensive disorders of pregnancy (OR, 1.34) and low birth weight (OR, 1.18) remained independently associated with ASCVD.

COMMENT

These data confirm that clinicians should consider pregnancy history when assessing cardiovascular risk in women, although the study was limited by self-report of pregnancy outcomes and low minority representation. — *Karol E. Watson, MD, PhD, FACC*

Dr. Watson is Director of the UCLA Barbra Streisand Women's Heart Health Program, Codirector of the UCLA Program in Preventive Cardiology, and Director of the UCLA Cardiology Fellowship.

Søndergaard MM et al. Association of adverse pregnancy outcomes with risk of atherosclerotic cardiovascular disease in postmenopausal women. JAMA Cardiol 2020 Sep 16; [e-pub]. (<https://doi.org/10.1001/jamacardio.2020.4097>)