FIVE THINGS TO KNOW ABOUT ...

Preeclampsia

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1 Preeclampsia has been redefined

In recognition of preeclampsia's multiorgan involvement, the American College of Obstetricians and Gynecologists modified the diagnostic criteria: proteinuria is not essential for diagnosis. The diagnosis may be made with the presence of hypertension plus the new onset of any one of thrombocytopenia, renal insufficiency, liver dysfunction, pulmonary edema, or cerebral or visual disturbances.[1]

2 Preeclampsia is a syndrome rather than one disease

Near-term preeclampsia, occurring after 34 weeks' gestation, is often accompanied by increased cardiac output, mildly increased total vascular resistance and normal fetal growth.[2] By contrast, preterm preeclampsia — often associated with reduced maternal cardiac output, markedly elevated total vascular resistance and intrauterine growth restriction (IUGR)[2] — is more ominous and warrants aggressive surveillance of mother and fetus.

3 Preeclampsia increases the risk of premature cardiometabolic disease in women

Women with preeclampsia, especially early-onset preeclampsia, have a risk of premature cardiovascular disease and death five times higher than that among unaffected women, and a significantly higher risk of chronic kidney disease and type 2 diabetes mellitus.[1] Lifestyle modification after delivery is recommended, including a healthy weight, moderate physical activity, avoidance of smoking, and periodic surveillance of blood pressure, glucose and lipids.[1]

4 Established risk factors should be used to screen for preeclampsia

Screening using clinical risk factors is recommended[3,4] and can be done efficiently by physicians, nurses or midwives. A list of risk factors is presented in Box 1.

Box 1: Screening for preeclampsia before 16 weeks' gestation based on clinical risk factors[4]

Women should be considered at increased risk of preeclampsia if they have one major risk factor or at least two moderate risk factors

Major risk factors
- Prior preeclampsia
- Known antiphospholipid syndrome
- Known type 1 or type 2 diabetes mellitus
- Chronic hypertension
- Assisted reproductive therapy in current pregnancy
- Pre-pregnancy or early first-trimester BMI > 30

Moderate risk factors
- Prior placental abruption
- Prior stillbirth
- Prior fetal IUGR
- Maternal age > 40 yr
- Nulliparity
- Multifetal pregnancy
- Known chronic kidney disease
- Known systemic lupus erythematosus

Note: BMI = body mass index, IUGR = intrauterine growth restriction.

5 Preeclampsia can be prevented

In women identified to be at high risk of preeclampsia, the risk can be reduced substantially with low-dose acetylsalicylic acid (ASA) (e.g., 81 mg at bedtime) at 12–20 weeks' gestation, stopped at 37–38 weeks. The use of ASA is safe for mother and fetus. It confers a 24% reduction in relative risk for preeclampsia (95% confidence interval [CI] 5%–38%), a 20% reduction for IUGR (95% CI 1%–35%) and a 24% reduction for preterm birth (95% CI 2%–24%).[5]

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Competing interests: None declared.

This article has been peer reviewed.

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Acknowledgement: The authors acknowledge the contribution of Dr. Joel Ray in the preparation of this manuscript.

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CMAJ 2016. DOI:10.1503/cmaj.151551