

Screening for complications after pregnancy-related disorders; don't restrict to gestational diabetes

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In the current issue of the journal, Brink et al. report the low adherence to screening recommendations after pregnancies complicated by gestational diabetes.¹ Only one-third of women were routinely screened. By increasing awareness under general practitioners screening rates went up to over 60%. Almost 20% of screened patients were shown to have diabetes five years after delivery. Data on the number of patients who were diagnosed only after the primary care physician was requested to recommence screening are not mentioned, so we do not know how many patients are missed by non-adherence. Non-adherence to screening recommendations is not a problem restricted to the Netherlands as was recently reported by Eggleston et al.² They reported that 75% of patients did not receive screening in the first year after delivery.

The population under study is small but other studies show a similar high prevalence of diabetes in this group of women with gestational diabetes. Screening in this high-risk population is therefore important especially because long-time unawareness of the diagnosis may lead to significant complications.

And increased diabetes risk is not the only complication threatening women with reproductive and pregnancy-related disorders. Goueslard et al. showed that women with gestational diabetes had a 25% increased risk of developing cardiovascular disease within seven years' post-partum. Hypertension, angina pectoris and myocardial infarction were all significantly more prevalent.³

And not only women with gestational diabetes, but also women with hypertensive disorders in pregnancy such as preeclampsia and eclampsia are at increased risk of developing cardiovascular disease in the future. The risk of post-partum hypertension is already higher the first year after pregnancy.⁴ But it is not restricted to hypertension. There is also a small but significantly increased risk for

cardiomyopathy and even more important a more than 50% increased risk for cardiovascular mortality.^{5,6}

In light of the substantially increased risk and given that timely intervention may prevent significant cardiovascular disease, the Dutch Society of Obstetrics and Gynaecology has recently initiated a multidisciplinary working group to develop a guideline for cardiovascular risk management after reproductive and pregnancy-related disorders.⁷

Although gestational diabetes and hypertensive disorders in pregnancy may appear to be the most important ones regarding late severe sequela, other diseases that associate with pregnancy may also cause substantial morbidity post-partum.

Despite the lack of published data, it seems prudent to assume that gestational thyroidal disease may also precede late thyroidal dysfunction. The presence of anti-TPO antibodies is associated with an increased risk of developing hypothyroidism during pregnancy due to the fact that the thyroid fails to adapt its function to the increased hormone requirement during pregnancy.⁸ Hormone requirement returns to normal after delivery but patients probably still have an increased risk of developing overt hypothyroidism later in life.

Despite the substantial risk of late sequelae following complicated pregnancy and the availability of adequate screening methods only a minority of women at risk will in fact receive screening. Luckily, as Brink et al. have shown, increasing awareness under physicians may reduce this problem.¹

REFERENCES

1. Brink HS, Alkemade M, van der Lely AJ, van der Linden J. Investigating screening for diabetes in women with a history of gestational diabetes. *Neth J Med.* 2016;74:429-33.

2. Eggleston EM, LeCates RF, Zhang F, et al. Variation in Postpartum Glycemic Screening in Women With a History of Gestational Diabetes Mellitus. *Obstet Gynecol.* 2016;128:159-67.
3. Goueslard K, Cottenet J, Mariet AS, et al. Early cardiovascular events in women with a history of gestational diabetes mellitus. *Cardiovasc Diabetol.* 2016;15:15.
4. Black MH, Zhou H, Sacks DA, et al. Hypertensive disorders first identified in pregnancy increase risk for incident prehypertension and hypertension in the year after delivery. *J Hypertens.* 2016;34:728-35.
5. Behrens I, Basit S, Lykke JA, et al. Association Between Hypertensive Disorders of Pregnancy and Later Risk of Cardiomyopathy. *JAMA.* 2016;315:1026-33.
6. Tooher J, Thornton C, Makris A, et al. Hypertension in pregnancy and long-term cardiovascular mortality: a retrospective cohort study. *Am J Obstet Gynecol.* 2016;214:722.e1-6.
7. Heida KY, Bots ML, de Groot CJ, et al. Cardiovascular risk management after reproductive and pregnancy-related disorders: A Dutch multidisciplinary evidence-based guideline. *Eur J Prev Cardiol.* 2016;23:1863-79.
8. Negro R, Formoso G, Mangieri T, Pezzarossa A, Dazzi D, Hassan H. Levothyroxine treatment in euthyroid pregnant women with autoimmune thyroid disease: effects on obstetrical complications. *J Clin Endocrinol Metab.* 2006;91:2587-91.