RESEARCH HIGHLIGHTS

DIARFTES

Progression of diabetic retinopathy found to be a potential risk during pregnancy

Progression of diabetic retinopathy could pose a potential problem for pregnant women with type 2 diabetes mellitus (T2DM), say researchers from Denmark.

Diabetic retinopathy is a known complication of pregnancy in women with type 1 diabetes mellitus (T1DM). By contrast, the prevalence and progression of retinopathy during pregnancy is not well-characterized in women with T2DM. "Before this project, we did a pilot study of pregnant women with T1DM or T2DM," explains first author Katrine Rasmussen (Rigshospitalet, Copenhagen). "During this research, it became evident to us that there is less focus on the risk of progression of retinopathy in women with T2DM compared to women with T1DM, and that the knowledge in this field is very limited."

Rasmussen and colleagues, therefore, conducted a retrospective study in an unselected group of pregnant women with T2DM who were referred to a specialist center before 20 weeks of gestation, an approach geared to reflect the outcome of women in daily clinical practice.

Ophthalmological examinations were performed at around 10 and 28 weeks of pregnancy; progression was defined as deterioration of retinopathy and/or development of macular edema.

Data from 80 women were included in the analysis. The presence of diabetic retinopathy was detected in early pregnancy in 11 women. Diabetic retinopathy was found to progress in 14% of the women, eight of whom had new-onset eye disease; one woman experienced sight-threatening progression in both eyes. Risk factors for progression of diabetic retinopathy during pregnancy included duration of T2DM and insulin requirement before pregnancy; high baseline HbA_{1c} levels also showed a trend toward increased risk of progression.

Although the danger of progression of diabetic retinopathy during pregnancy seems to be low in women with T2DM, this risk should not be ignored. "From this and our previous study, we found that it is of great importance that women with T2DM



are encouraged to follow the screening program for diabetic retinopathy during pregnancy," Rasmussen concludes. *Vicky Heath*

Original article Rasmussen, K. L. et al. Progression of diabetic retinopathy during pregnancy in women with type 2 diabetes. *Diabetologia* **53**, 1076–1083 (2010)