

## **October 2008. Position statement on screening for Diabetic Retinopathy in pregnancy**

### **Diabetes and pregnancy**

Women with diabetes who become pregnant require special care as there are risks to both the mother, the developing foetus and the newborn child.

Approximately 650,000 women give birth in England and Wales each year, and 2–5% of pregnancies involve women with diabetes. Approximately 87.5% of pregnancies complicated by diabetes are estimated to be due to gestational diabetes (which may or may not resolve after pregnancy), with 7.5% being due to type 1 diabetes and the remaining 5% being due to type 2 diabetes. The prevalence of type 1 and type 2 diabetes is increasing. In particular, type 2 diabetes is increasing in certain minority ethnic groups (including people of African, black Caribbean, South Asian, Middle Eastern and Chinese family origin).

The National Institute for Health and Clinical Excellence has developed a clinical guideline for the management of diabetes in pregnancy, which was published in March 2008. Prevention of and surveillance for long-term complications of diabetes, such as retinopathy, nephropathy and neuropathy during pregnancy are included in the scope of this guideline.

Progression of diabetic retinopathy may occur during pregnancy. The worsening of retinopathy during pregnancy can be quite significant and may require photocoagulation during pregnancy, more frequently in those patients with pre-existing diabetic retinopathy. The known risk factors for progression of diabetic retinopathy in pregnancy are summarised below:

1. Pregnancy is independently associated with progression of diabetic retinopathy.
2. Baseline severity of retinopathy
3. Poor metabolic control at conception
4. Rapid improvement of glycaemic control
5. Poor metabolic control during pregnancy or the early post partum period
6. Duration of diabetes
7. Chronic hypertension and pregnancy induced hypertension

The NICE Guideline recommends that retinal assessment should be carried out by digital imaging with mydriasis using tropicamide.

In accordance with the NICE Guideline, the recommendations of the English National Screening Programme are

1. Annual Screening for diabetic retinopathy is recommended in the preconception period using two-field mydriatic digital photography using Tropicamide.
2. Women with type 1 and type 2 diabetes should be offered two-field mydriatic digital photography to National Standards at (or soon after) their first antenatal clinic visit and again at 28 weeks' gestation.
3. If background diabetic retinopathy is found to be present, an additional screen should be performed at 16-20 weeks.
4. If referable diabetic retinopathy is found to be present in early pregnancy, careful ophthalmological supervision is required depending on the level of retinopathy both during pregnancy and for at least 6 months post-partum.
5. Because, like many drugs that are used in pregnancy, Tropicamide is only licensed for use in pregnancy under the direction of a registered medical practitioner, care pathways should be set up in such a way as to enable this to be undertaken. Written policies and protocols signed off by the Clinical Lead specifically dealing with the administration of eye drops to pregnant women should always be in place.

The English national screening programme has been set up to provide annual mydriatic digital photography and, in many areas of England, is not funded or organised in a way that can facilitate the more frequent assessments required during pregnancy.

From the perspective of the National Screening Programme, it is the responsibility of the local Lead Clinicians for Obstetrics, Diabetology, Ophthalmology and Diabetic Retinopathy Screening to make sure that there are local policies, protocols and care pathways for photographing the eyes of pregnant women with diabetes. Women with gestational diabetes are not part of the national screening programme.

October 2008