



**Wolverhampton
Diabetes Care**

Pre-conception Care for women with Pre-existing Diabetes

Women with diabetes who are of child-bearing age should be given pre-conception counselling in an opportunistic fashion. We offer pre-conception counselling during routine diabetes clinic visits and also within dedicated clinic sessions in the Antenatal clinics. All women with diabetes who become pregnant are managed jointly with obstetrics in the Joint Diabetes Antenatal Clinic.

***Aim:** To empower women with diabetes to make the experience of pregnancy and childbirth a positive one by providing information, advice and support that will help to reduce the risks of adverse pregnancy outcomes for mother and baby.*

Importance of good glycaemic control

- Establishing good glycaemic control before conception and continuing this throughout pregnancy will reduce the risk of miscarriage, congenital malformation, stillbirth and neonatal death.
- The risks can be reduced but not eliminated.

Referral for pre-conception care:

Referrals can be made by fax or by telephone by GPs or directly by women contemplating pregnancy at following numbers:

1. Combined Antenatal clinic on 01902 695145,
2. Diabetes Specialist Midwife on 01902 695146 and
3. Diabetes Centre on 01902 695310.

Clinic appointments will be flexible to fit in with the work/home commitments of the prospective parents.

Information about diabetes in pregnancy

Women planning pregnancy should be offered information about how diabetes affects pregnancy and how pregnancy affects diabetes.

Support during pregnancy

Additional time and effort is required to manage diabetes during pregnancy and that there will be frequent contact with healthcare professionals. Women should be given information about the local arrangements for support, including emergency contact numbers.

Contraception

Contraception is recommended until good glycaemic control has been established.

Dietary review:

- Women should be offered a dietetic review during pre-conception care. They should receive advice about balanced diet and information regarding carbohydrate counting/assimilation if necessary.
- Women who have a body mass index above 27 kg/m² should be offered advice regarding weight loss prior to conception.

Medications:

- Folic acid: Women should be advised to take folic acid (5 mg/day) prior to conception and until 12 weeks of gestation to reduce the risk of neural tube defect.
- Antihypertensive Medication: Angiotensin-converting enzyme inhibitors and angiotensin-II receptor antagonists should be discontinued before conception.
- Alternative antihypertensive agents suitable for use during pregnancy should be substituted.
- Statins: Statins should be discontinued before pregnancy or as soon as pregnancy is confirmed.

Glycaemic control:

Home Glucose Monitoring: Regular monitoring of blood glucose at home is recommended and an up to date glucometer should be offered if necessary. Women requiring intensification of hypoglycaemic therapy are advised to increase the frequency of monitoring to include fasting, pre and postprandial levels.

- Women with type-1 diabetes should be offered ketone strips and advice on testing.
- Individualised targets for self-monitoring of blood glucose should be agreed taking into account the risk of hypoglycaemia.
 - **Pre meals 4-6 mmol/l**
 - **1 hour post prandial <7.8 mmol/l**
- Women are encouraged to maintain their HbA_{1c} as close to normal as possible (preferably ~ 6.1%) for at least 3 months prior to conception. Women with HbA_{1c} above 10% should be strongly advised to avoid conception.
- Continuous subcutaneous insulin infusion should be considered for women who are unable to achieve the glycaemic targets.
- Hypoglycaemia: Patients should be educated in self-management of hypoglycaemia and glucogel should be issued. Women with type-1 diabetes should be provided with glucagon and appropriate training.
- Women with type-2 diabetes may be advised to use metformin as an adjunct or alternative to insulin in the preconception period. All other oral hypoglycaemic agents should be discontinued before pregnancy and insulin substituted.

- Rapid-acting insulin analogues (aspart and lispro) do not adversely affect the pregnancy or the health of the fetus or newborn baby and are safe during pregnancy. 6
- There is insufficient evidence regarding the use of long-acting insulin analogues during pregnancy. Therefore isophane insulin (also known as NPH insulin) remains the first choice during pregnancy. In some women, insulin analogues may offer benefits over isophane insulin in terms of flexibility and improved glycaemic control with less risk of hypoglycaemia. Informed consent should be obtained and documented if women wish to use long-acting analogue insulin in pregnancy.

Retinal assessment in the pre-conception period:

- Women should be offered retinal assessment at their first appointment (unless an annual retinal assessment has occurred within the previous 3 months)
- Retinal assessment should be carried out by digital screening as recommended by the UK National Screening Committee. Women should be encouraged to make an appointment with an accredited optometrist for digital screening.
- Walk-in screening service is available at the diabetes centre, New Cross Hospital from 9:00 AM to 1:00 PM (Monday to Friday).
- Women with significant retinopathy should be advised to avoid rapid optimization of glycaemic control and to defer pregnancy until retinopathy is treated and is stable.

Renal assessment in the pre-conception period:

- Women with diabetes should be offered a renal assessment, including urine for estimation of microalbuminuria
- Referral to a nephrologist should be considered if serum creatinine is abnormal (120 micromol/litre or more or the estimated glomerular filtration rate is less than 45 ml/minute/1.73 m²), or in the presence of significant proteinuria before discontinuing contraception.

Investigations:

- Bloods: FBC, HbA1c, TFT's, LFT's, U&E's and
- Urine: Urine for microalbuminuria if not already requested in preceding 3 months.
- Check immunity status for Rubella.

Smoking cessation:

- All women planning a pregnancy and who smoke should be advised with respect to smoking cessation and referred to smoking cessation services if required.