

key points

SELECTED BY

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Diabetes in pregnancy is associated with a five fold increase in risk of stillbirth and a two-fold increased risk of congenital defects compared with the general maternity population. Fasting blood glucose levels above 5.3 mmol/L can directly affect organogenesis, particularly of the fetal heart and spine. Hyperglycaemia can cause placental failure and stillbirth and for this reason early delivery is recommended.

Good blood glucose control prior to conception can minimise pregnancy risks towards levels approaching that of women without diabetes. The recommended glycated haemoglobin (HbA_{1c}) target in preparation for pregnancy is 48 mmol/mol (6.5%) if this can be safely achieved. Women with an HbA_{1c} ≥ 86 mmol/mol should be strongly advised against pregnancy.

Statins, ACE inhibitors and angiotensin 2 receptor antagonists, most oral hypoglycaemic agents and antihypertensive drugs are contraindicated in pregnancy, and usually stopped pre-conception. For women with type 1 or type 2 diabetes, high dose folic acid (5 mg) should be prescribed to prevent fetal spinal malformation in those considering pregnancy. Aspirin (75 mg) is recommended from 12 weeks onwards to reduce pre-eclampsia risk.

In normal pregnancy, the increased insulin resistance mediated by placental hormone secretion is compensated by increased maternal insulin secretion to maintain euglycaemia. Gestational diabetes arises from an inability to meet these increased insulin requirements adequately.

Lifestyle modification with input from a specialist diabetes dietician is key to the management of gestational diabetes. The importance of dietary management alongside blood glucose monitoring (and insulin where appropriate) was confirmed in the Australian Carbohydrate Intolerance Study (ACHOIS), an important randomised trial that established a link between improved glycaemic control in gestational diabetes and reduced adverse perinatal outcomes. If glycaemic improvement is inadequate within one to two weeks, addition of metformin and/or insulin therapy may be required.

All treatment for gestational diabetes is stopped at delivery. NICE guidelines advocate a single fasting blood glucose or HbA_{1c} three months after the birth, usually undertaken in primary care. Women with gestational diabetes have a significant lifetime risk of developing type 2 diabetes, hence diabetes screening must be undertaken on an annual basis in primary care.