

Women's Diabetes Service

Metformin Information for Diabetes in Pregnancy

Gestational Diabetes Mellitus (GDM) is one of the most common medical conditions of pregnancy affecting approximately 10% of pregnant women. The goals of managing & treating GDM and Type 2 diabetes in pregnancy are to reduce the risks of some of the common complications that can occur.

Risks for Mother

- Increased rate of caesarean section.
- Increased risk of developing type 2 diabetes later in life.
- Increased risk of early delivery (induction)

Risks for Baby

- May grow larger prior to birth.
- Low blood glucose levels at birth.

If your baby's blood glucose levels (BGLs) are low at birth, your baby may need to be cared for in the special care baby unit (SCBU).

The aims of managing GDM are to prevent any of these complications by achieving as near normal BGLs for you (mother).

When dietary changes and physical activity are not enough to reach the targets for glucose control during pregnancy it is necessary to consider medication treatment. About one-third of all women with GDM require tablets and/or insulin injections as part of their treatment.

Metformin

Has been used safely & to improve BGLs for many years for people with type 2 diabetes.

There are two (2) types: either Metformin IR (Immediate Release) or Metformin XR (Extended Release) tablets. Recent studies in Australia & New Zealand assessing the use of these tablets during pregnancy have showed that metformin was effective in lowering the mother's blood glucose levels & safe for both mother and baby. Metformin does cross the placenta & are at about half the mother's levels. Studies indicate that there are benefits for both mother & baby in terms of weight gain & fat deposition.

Side Effects

Most people have no problems taking metformin but there can be some side effects in the first few days such as:

- Nausea &/or Vomiting
- Diarrhoea
- Loss of appetite
- Mild abdominal discomfort such as bloating
- Taste disturbance (such as metallic taste in mouth)



Women's Diabetes Service

Metformin Information for Diabetes in Pregnancy

If side-effects occur it is in the first few days of treatment & usually resolve spontaneously. To help to prevent these side effects metformin is prescribed at a low starting dose.

Recommended to be taken during or immediately after meals—not on an empty stomach. Notify your doctor or diabetes educator if you have any ongoing side effects which do not settle within the first week.

Instructions for Dose Adjustment

Target levels:

- Before breakfast less than 5.1 mmol/L
- 2 hours after meals less than 6.8 mmol/L

Your starting dose is:

- Metformin IR 500 mgs 1 tablet usually with your main meal **OR**
- Metformin XR 500 mgs with your main meal (usually the evening meal) or bed-time snack.

Your Diabetes Health Care Team will advise you of when to take your Metformin based on your glucose profile

For Fasting BGL elevations: If BGLs remain above target & no side-effects increase by 1x 500mg tablet.

- This can be done every 4 days until you reach the target of less than 5.1 (to a maximum total daily dose of 2000mg / 4x 500mg tablets).

For Meal-Time BGL elevations: If BGLs remain above target & no side-effects increase by 1x 500mg tablet.

- This can be done every 4 days until you reach the target of less than 6.8 (to a maximum total daily dose of 2000mg / 4x 500mg tablets).

There will be follow up with a diabetes educator via phone or email 1-week after starting this medication to support you with these changes.

If the maximum dose of 2000mg per day is reached and your blood glucose levels are still not within target range then insulin injections may be needed. This will be discussed with you by the Women's Diabetes Team or the Diabetes Physician.

For more information

Women's Diabetes – Women's Outpatients
 Women's and Children's Hospital
 72 King William Rd, North Adelaide SA 5006
 Telephone (08) 8161 8823 or 81619883
 Email: womensdiabetes@sa.gov.au
 Date Developed: October 2024



www.ausgoal.gov.au/
 creative-commons



Government of South Australia
 Women's and Children's
 Health Network