

THE PROPER TREATMENT FOR GDM PATIENTS AT DIFFERENT INSULIN RESISTANT STATES.

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First-line treatments for gestational diabetes mellitus (GDM) including metformin alone, metformin plus insulin, and insulin alone. Insulin should be considered as the first option in women who are at high risk of failing on anti-diabetic agents therapy, including some of the following factors: 1. diagnosis of diabetes 20 weeks of gestation; 2. need for pharmacologic therapy 30 weeks; 3. fasting plasma glucose levels 110 mg/dl; 4. 1-hour postprandial glucose 140 mg/dl; 5. pregnancy weight gain 12 kg. Besides insulin, metformin is also considered safe for use during pregnancy in terms of obstetric and perinatal outcomes. For patients with mild GDM, metformin can be useful first to improve glucose control in insulin resistant states. Metformin can be started at a dose of 500 mg once or twice daily with food and increased, typically over a period of 1 to 2 weeks, to meet glycaemic targets up to a maximum daily dose of 2500 mg. Insulin should be supplemented when satisfactory glucose level couldn't be achieved through metformin alone (insulin is needed in 10-46% of GDM patients treated with metformin). Gestational age at diagnosis, mean pretreatment glucose level, and use of metformin earlier in pregnancy predicts supplemental insulin therapy in GDM patients. If patients are at high risk of supplementing insulin, insulin should be added in time to achieve glycemic control, or metformin and insulin should be used together when GDM patients need drug therapy. The dosages of insulin decreased when combined with metformin. GDM patients also gain less weight during pregnancy when these two drugs are used together.