Section 9
SPECIAL SITUATIONS

9.1 Diabetes and Pregnancy

9.1.1 *Pre-gestational diabetes*

Women with type 2 diabetes who become pregnant are said to have pre-gestational diabetes. Maternal and fetal outcomes are excellent if the pregnancy is planned and tight glycemic control is achieved. The steps to achieve these are:

- Normalization of HbA_1C and tight glycemic control with insulin (*i.e.* fasting sugar <90 mg/dl and postprandial <120mg/dl) before a planned pregnancy.
- Human insulin is preferred. If affordability and availability is an issue, purified animal insulin can be used.
- Folic acid supplementation should be given.
- Antihypertensive agents should be changed to calcium channel blockers or alpha methyldopa.
- Pre pregnancy baseline evaluation of eyes and kidney function must be done.
- Improvement of nutritional status should be made.
- Maternal and fetus surveillance during pregnancy should ideally be done by a specialist in diabetes and the obstetrician.

9.1.2 *Gestational diabetes*

Glucose intolerance of any severity detected for the first time during pregnancy is termed as gestational diabetes mellitus (GDM).

(i) Screening for gestational diabetes

(i)a *Indications*:

- History of GDM.
- First degree relative with diabetes.
- Pre-pregnancy obesity.
- History of large weight babies.
- History of still born babies or infants with congenital abnormalities.

- Bad obstetric history including recurrent fetal wastage, hypertension, eclampsia, hydramnios.
- Repeated or persistent urinary tract infection.
- Glycosuria during pregnancy.
- Age above 25 years.

(ii) Screening methods for GDM

- Plasma glucose 1 hour after 50 g of oral glucose (fasting not required)
- If 1 hr post 50 g glucose load, venous plasma glucose is >140 mg/dl; OGTT needs to be done to confirm status.

(iii) Diagnosis of GDM with 100g glucose load

Plasma Glucose	**Glucose load 100 g**
Fasting	95
1 - hour	180
2 - hour	155
3 - hour*	140

*If 100g glucose load is used

(iv) Goals for therapy

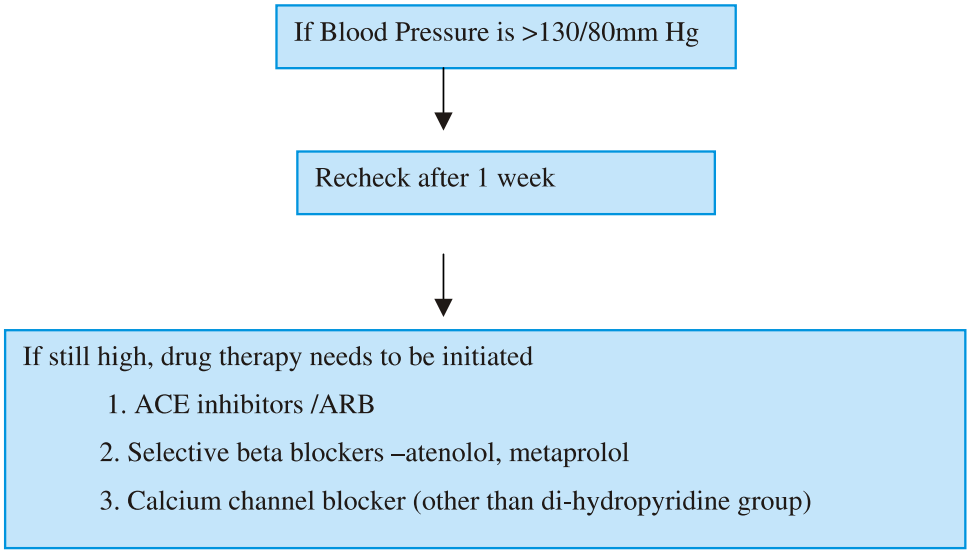
Fasting	90 mg/dl
1 hr PP	<140 mg/dl
2 hr PP	<120 mg/dl

2 hr OGTT using 75g glucose should be done 6-8 weeks after delivery for reclassification.

9.2 Hypertension

A person with diabetes as well as with hypertension should be treated more aggressively than a non-diabetic individual with hypertension.

9.2.1 *Blood pressure target*



If consistently, blood pressure is > 150/100 mm Hg after I month of initiation of drug therapy, refer to a specialist.

9.2.2 *Severe hypertension*

If at initial visit, blood pressure is > 180/110 mm Hg, treatment should be initiated and patient to be referred to a specialist as early as possible.

9.3 Acute complications

9.3.1 *Hypoglycemia*

It is a common side effect due to drug therapy of diabetes especially with sulphonylureas and insulin. The patient may have classical symptoms like sweating, tremors, palpitation with or without loss of consciousness.

(i) Steps to be taken:

- If glucose monitor is available, random plasma glucose should be estimated.
- If glucose monitor is not available and patient is conscious, he should be treated with oral glucose/ sweets/sugar.
- If patient is brought in unconscious stage give 25-50 ml of 25% dextrose *iv*

- If there is inadequate response, maintain a 5% dextrose drip and refer to hospital immediately.
- If recurrent hypoglycemia persists, check for renal function.

9.3.2 *Hyperglycemia*

Usually such emergencies occur in certain situations like infections or other stressful conditions. There is usual history of missed dose of insulin or poor control of diabetes. It is characterized by abdominal pain and is manifested with breathlessness, vomiting, altered sensorium and dehydration.

(i) Steps to be taken:

- If glucose monitor is available, check plasma glucose levels.
- Check for urine ketones.
- Intravenous saline infusion should be started immediately and refer to hospital.