

Pregnancy & Diabetes Classification

Pre - gestational	Gestational
Appears before pregnancy or within first 5 months (20 wks of pregnancy)	Appears after 20 wks of pregnancy
Higher risk to baby for birth defect	Lower risk to baby in 1st trimester
Difficult to control	Relatively easier to control
Usually continue after delivery	May disappear after delivery

- Approximately 7% of all pregnancies are complicated by GDM
- In India it is reported as high as 12% of all pregnancy



Definition of Diabetes

during pregnancy (GTT 100 gms glucose)

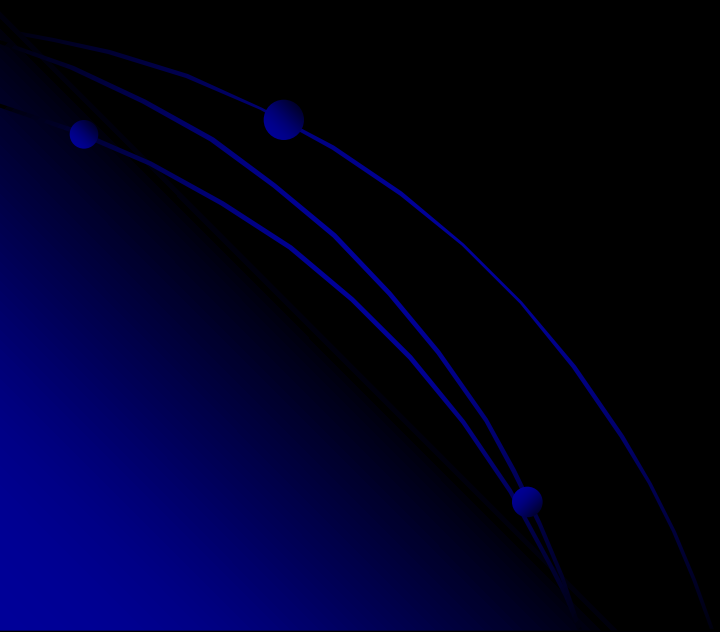
FBS	More than 95 %
1 Hour Blood Glucose	Level \geq 180 mg/dl
2 Hour Blood Glucose	Level \geq 155 mg/dl
3 Hour Blood Glucose	Level \geq 140 mg/dl

Diagnosis of diabetes during pregnancy

FBS	More than 95 %
PLBS	More than 130 mg%
Screening test positive 1 hour blood glucose after 50 gms oral glucose	More than 140 mg%

Complications due to uncontrolled blood glucose in early pregnancy

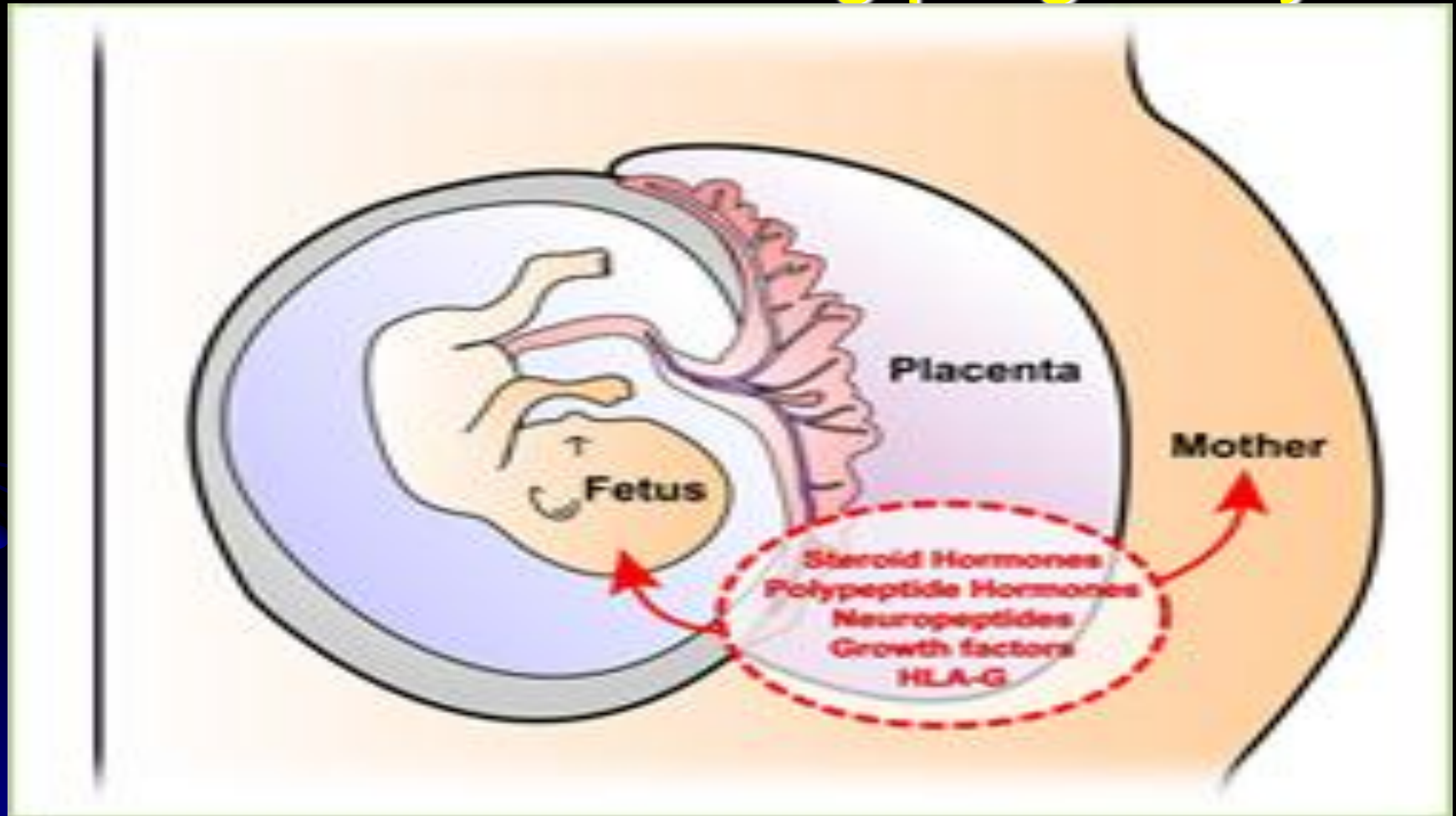
- congenital malformations
- spontaneous abortion



Complications due to uncontrolled blood glucose in later pregnancy

- fetal macrosomia (Large size baby , more than 4 kg wt),
- Preeclampsia
(High BP, Proteinuria, swelling all over the body)
- spontaneous abortion
- Sudden foetal death

Why there is increased tendency for diabetes during pregnancy



Maternal complications

Transverse position



Placenta abruptio

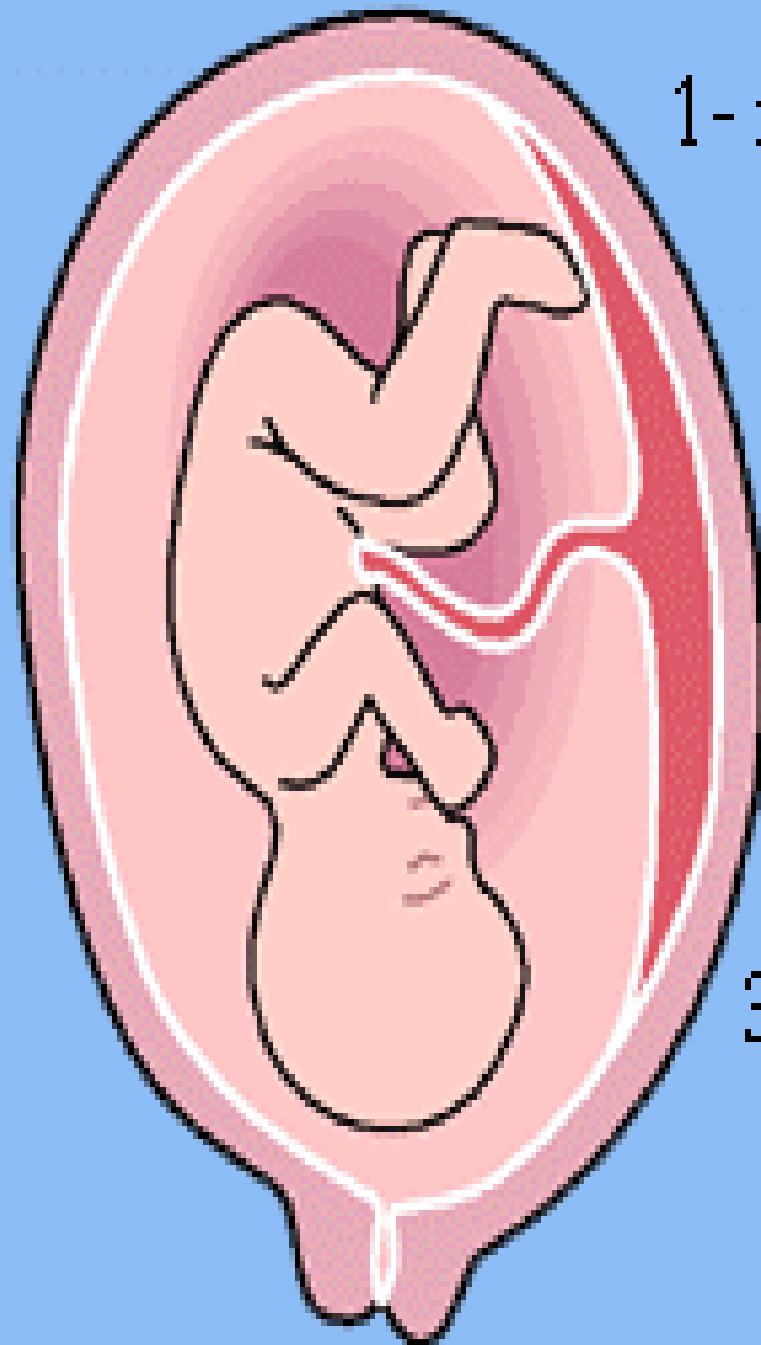


Breech presentation



Placenta previa



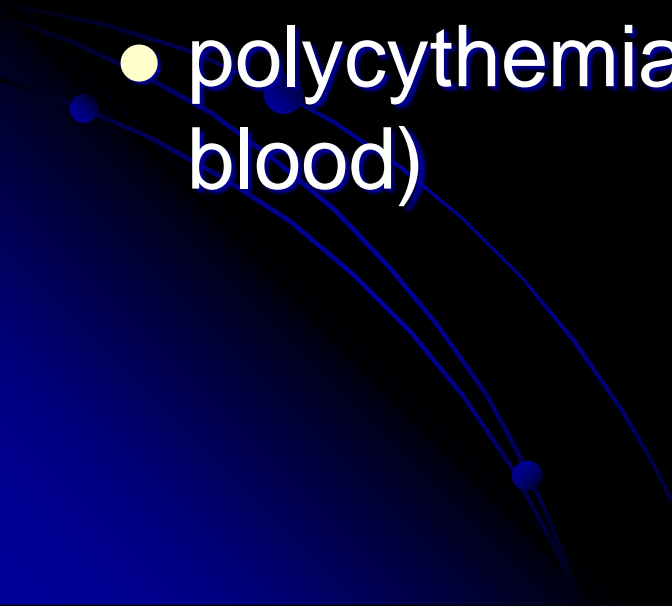


1- mother's blood brings extra glucose to the fetus

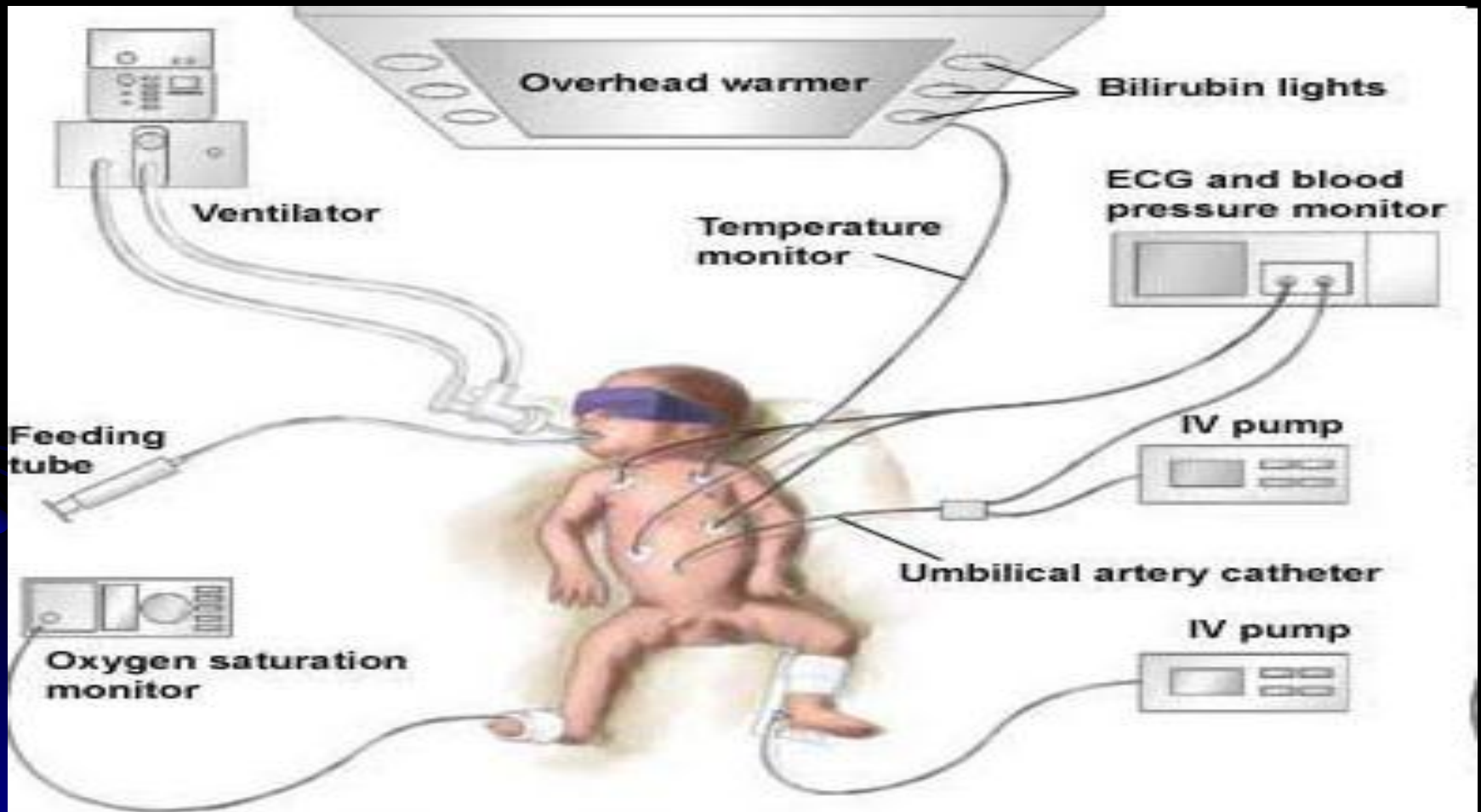
2- fetus makes more insulin to handle extra glucose

3- extra glucose gets stored as fat and fetus becomes larger than normal

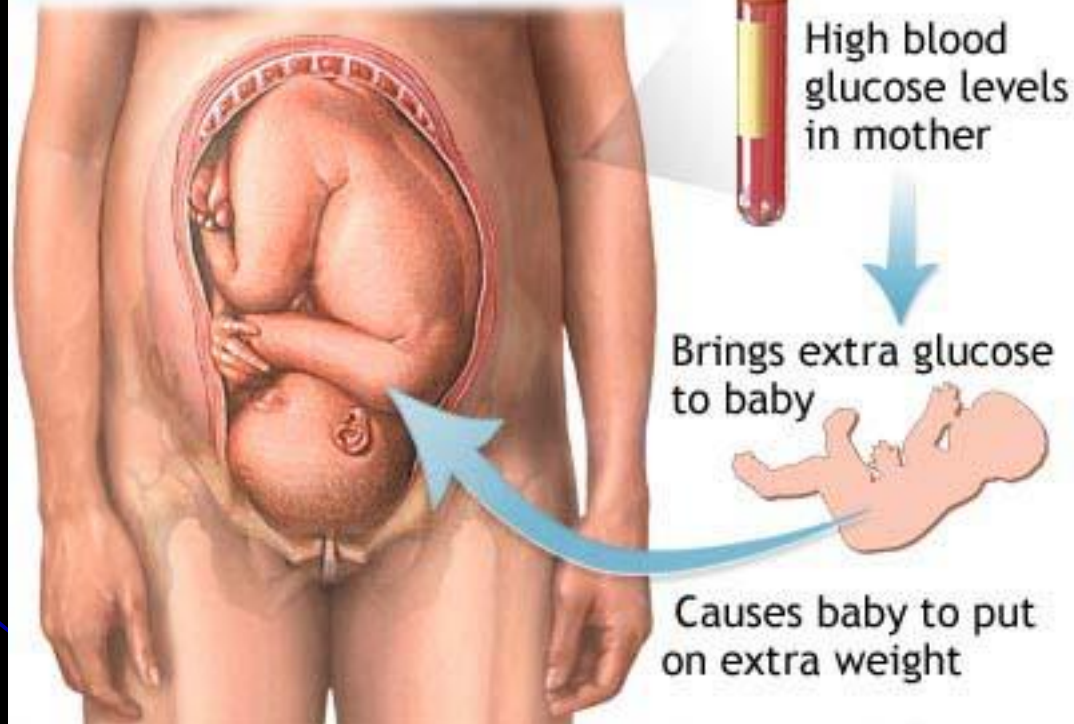
Complications in new born

- respiratory distress,
 - hypoglycemia,
 - hypocalcemia
 - Hyperbilirubinemia (Neonatal jaundice)
 - polycythemia and hyperviscosity (thick blood)
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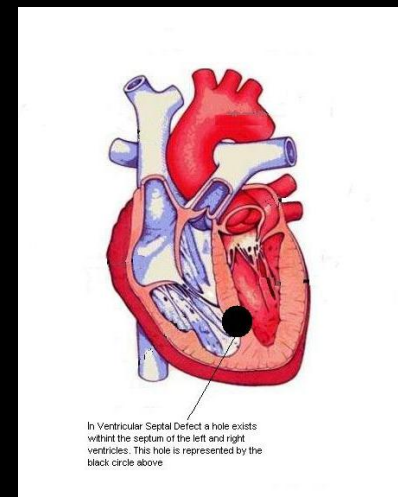
New born complications



Gestational Diabetes



Congenital malformations (birth defects)



Treatment

- Close monitoring
- Tight control of plasma glucose
- Management of complications

Management of diabetes during pregnancy

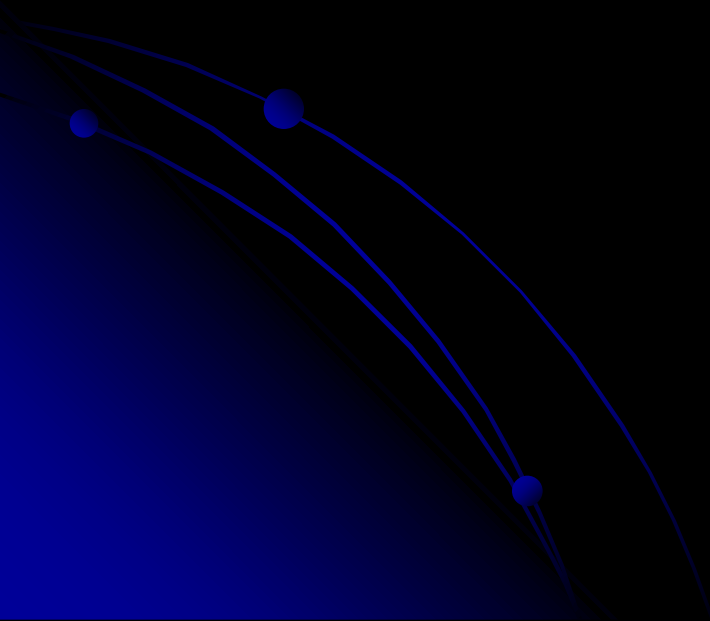
- Home blood glucose monitoring
- Diet control/Folate supplementation
- Regular exercise
- Fetal monitoring by ultrasound scan
- Accurate insulin regimen

In whom to check for diabetes during pregnancy

- Family history of Diabetes
- Glucose in urine sample
- History of unexplained prenatal loss
- History of large baby
- History of congenitally malformation infant
- Maternal obesity
- Maternal age more than 25 years
- Members of racial group with high prevalence of Diabetes Mellitus

Successful outcome

- Preconception counseling
- and optimal control of diabetes before, during, and after pregnancy minimize maternal and fetal risks



Prevention of birth defects

- malformations may develop before pregnancy is diagnosed (6-10 wks of pregnancy), the need for constant, strict control of glucose levels is stressed to women who have diabetes and who are considering pregnancy