

Newborn Endocrine:
Infants of Diabetic Mothers (IDM) & Hypoglycemia in Newborns
Nursing 201: Nursing Care of Special Populations

Diabetes & Pregnancy

- Before insulin, few diabetic women were able to conceive
- If pregnancy occurred, mortality was high
- Poor glycemic control during organogenesis (1st trimester) is thought to be major reason for congenital malformations

“The single most important factor influencing fetal Well-being is euglycemic status of the mother.”

Gestational Diabetes

- Alteration in _____ metabolism initially noted during pregnancy.
- The symptoms and abnormalities in glucose tolerance _____ after delivery.

Clinical Findings of the Fetus & NB of Diabetic Mothers

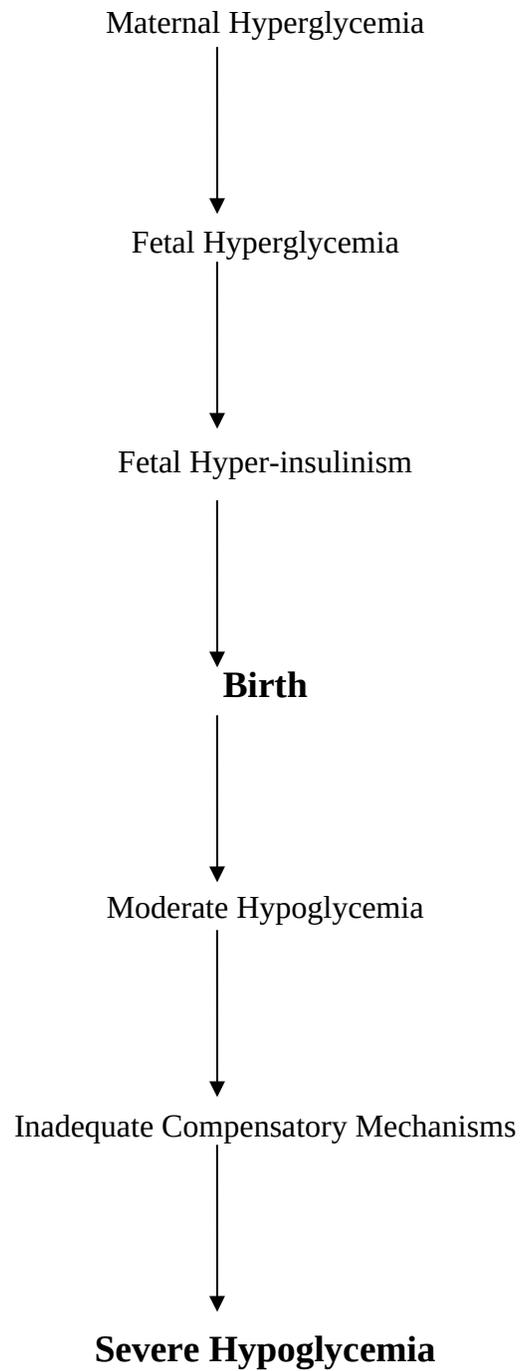
Macrosomia:

Due to size R/F:

Hypoglycemia:

- 1.
- 2.
- 3.
- 4.

Hypoglycemia in Infants of Diabetic Mothers



Clinical Findings of IDM:

- Macrosomia (large size), but immature
-
-
- Flushed and ruddy
- Liberal vernix
- Floppy, lethargic

Hypoglycemia S/Sx:

- May be asymptomatic
- Tremors
-
- Irritable
- Apnea
- Cyanosis
- ARD

Why do we need glucose?-

If deprived of glucose? - Irreversible CNS damage, mental retardation, seizures

Prevention	Treatment

*always follow facilities protocol

Hypocalcemia:

Polycythemia:

<u>Hyperbilirubinemia:</u>
<u>Respiratory Distress Syndrome:</u>
<u>Congenital Anomalies</u>

Nursing Considerations for Mother:	IDM:
<ul style="list-style-type: none"> • Meticulous monitoring • Typical induction after 37 weeks depending on lung maturation • Fetal mortality increases after 36 weeks due to decrease in placental circulation 	<ul style="list-style-type: none"> • Fetal well-being testing • Special care nursery plan • Early feedings • Prevent/ treat hypoglycemia • Consider colostrum aspiration prior to delivery, IV D10 if poor suck • Anticipate RDS

Long Term Effects to IDM:

- 1-5% risk of developing DM
- 10 x more likely to become obese
- CP and epilepsy 3-5x higher than normal population
- 35% learning disabilities

Hypoglycemia in NB (not r/t diabetic mother)

- Glycogen stores are low for:
 - o Chronically stressed
 - o Asphyxiated infants
 - o
 - o
 - o

<u>Stressed:</u>
<u>SGA:</u>
<u>*Onset:</u>
<u>LGA:</u>
<u>Preterm:</u>

***see IDM for same hypoglycemic treatment**