

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

RHESUS ISOIMMUNIZATION

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Objectives

By the ends this lecture the student will be able :- ▶

Identify rhesus isoimmunization ▶

List the sign & symptom of it ▶

Discuss the nursing interventiomn ▶

Definition

Rhesus isoimmunization is the condition where incompatibility exists between the fetal and maternal rhesus group such that an immune response occurs.

Path physiology

-The exposure of the Rh-negative mother to Rh-positive red cells occurs as a result of asymptomatic fetomaternal hemorrhage during pregnancy.

Causes / Risk Factors

Delivery ▶

Abruption placenta ▶

Miscarriage ▶

Incomplete Hydatiforme mole ▶

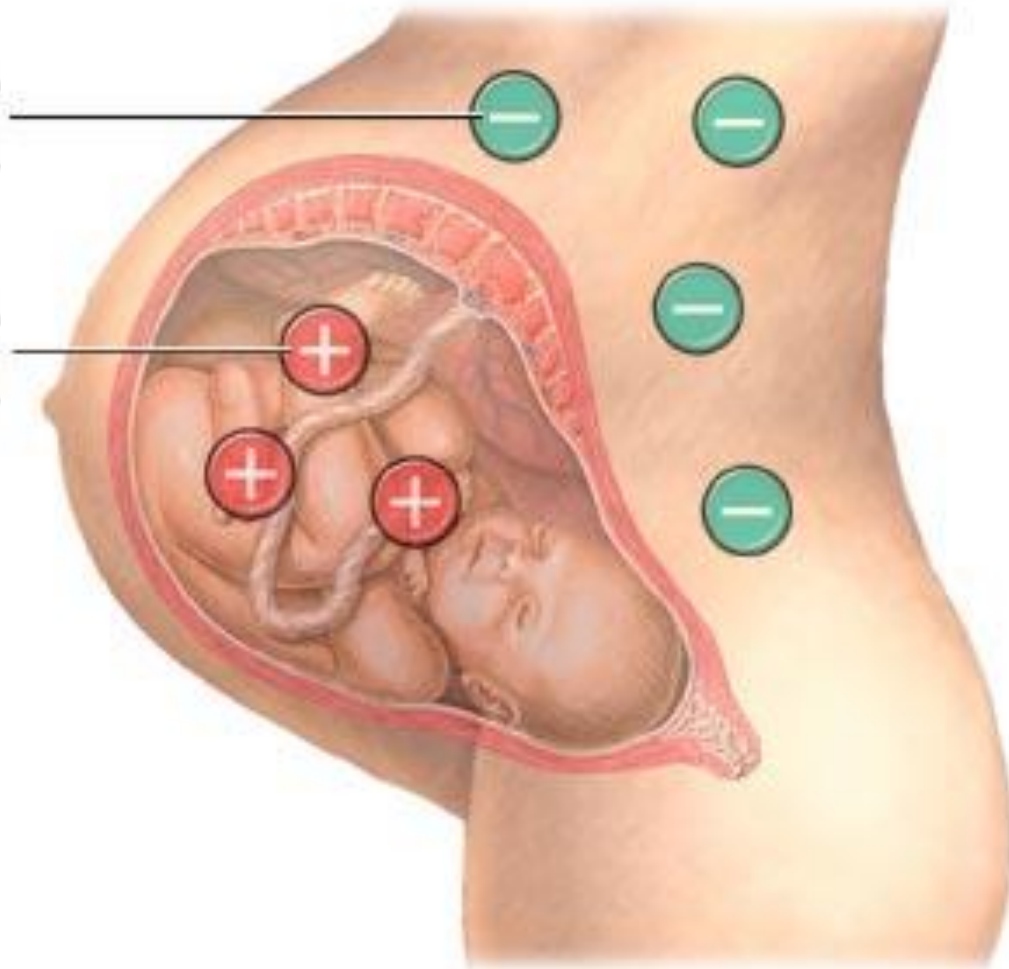
Invasive procedures ▶

Ectopic pregnancy ▶

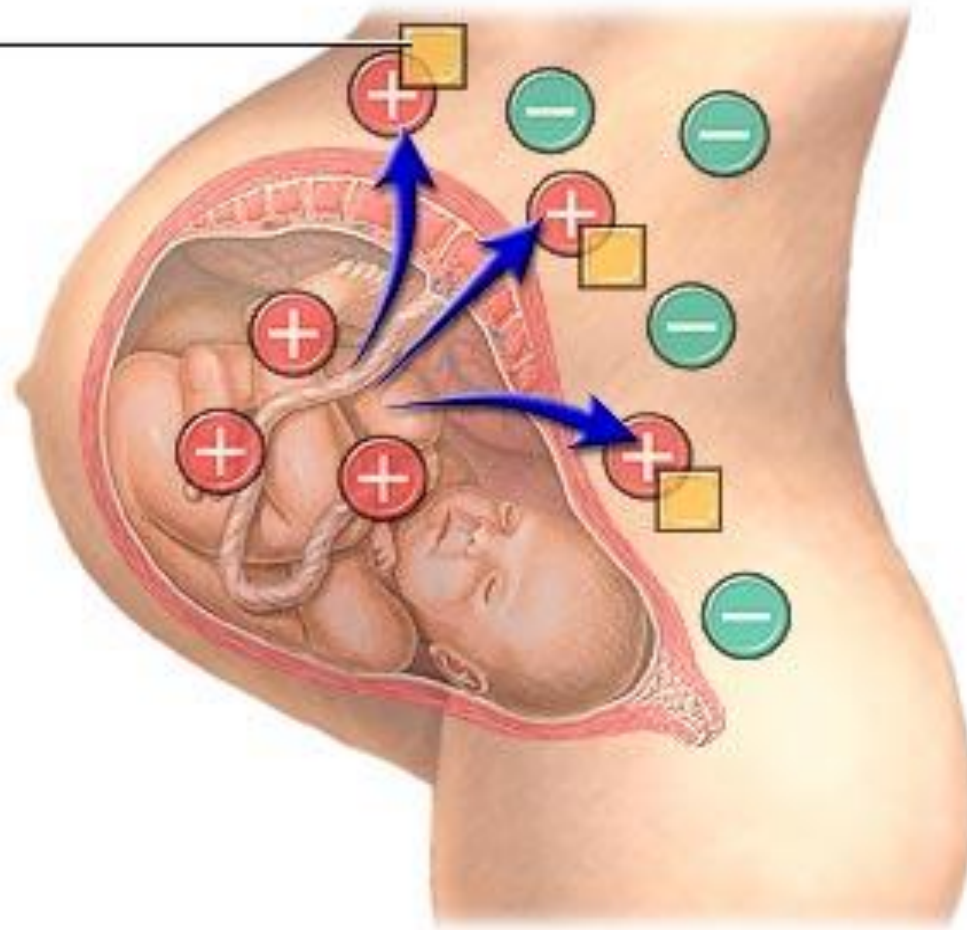
Other causes of bleeding during pregnancy ▶

Rh negative
blood cell

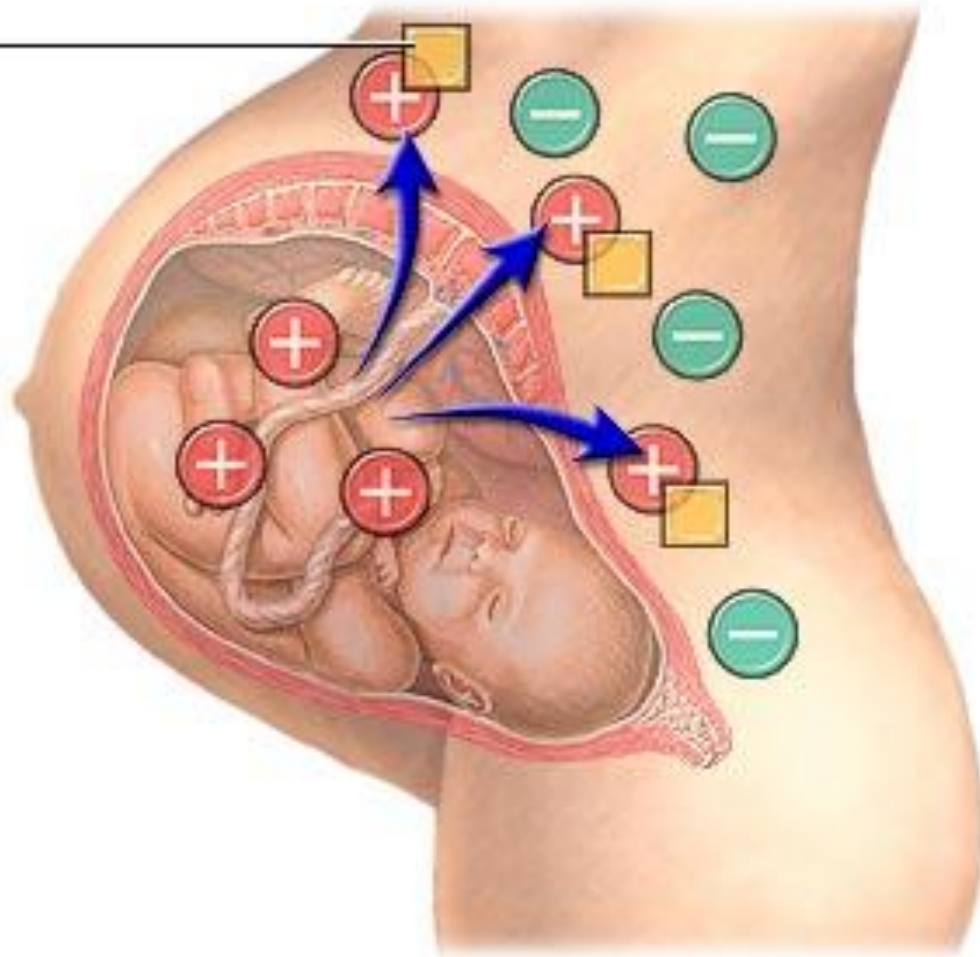
RH positive
blood cell



Antibody



Antibody



Rh- Iso immunization

Risk of fetromaternal hemorrhage is increased in
abruption placenta, threatened abortion, toxemia,
after cesarean section, ectopic pregnancy,
amniocentesis, intrauterine fetal transfusion.

And it occur during normal delivery



Complications

Repetitive miscarriage ▶

Fetal anemia ▶

Hydrops fetalis (Hydrops fetalis is defined as an abnormal collection of fluid in two or more fetal body compartments, including ascites, pleural effusions, pericardial effusions, and skin edema) ▶

Intra uterine fetal death ▶

Investigations

Antibody titers ▶

Serial measurements of circulating antibody titers ▶
should be performed every 2–4 weeks.

MCA (Middle Cerebral Artery) pulsatility index by ▶

Doppler ultrasound is diagnostic for fetal anemia

cont

Invasive testing ▶

If antibody titers continue to rise in the presence of an Rh (D)-positive fetus, invasive testing may be required. ▶

Amniocentesis

Fetal blood sampling for fetal hemoglobin ▶

Management

Rhesus (anti-D) prophylaxis ▶

250IU Anti-rhesus Immunoglobulin: Give ▶
one dose at 28 weeks' gestation and again
after delivery if the baby is Rh (D)-positive
within 72 hrs.

Any bleeding or invasive procedure after ▶
12 wks, the mother should receive
prophylactic dose of 250 UI.

Monitoring the pregnancy

- Blood group (ABO and Rh status) and antibody status testing at booking and again at 28-30 weeks' gestation

Fetal surveillance and blood transfusion

- Ultrasound examination to detect/rule out hydrops fetalis (ascites, pleural effusions, pericardial effusions, or skin edema).

In case of anemia, blood transfusion done from

THANK YOU!

