



RH NEGATIVE PREGNANCY

A PRACTICAL GUIDE FOR RH IMMUNE GLOBULIN (RHIG): USE AND PATIENT COUNSEL

Evidence-based considerations for obstetric care providers



RhIG has been in clinical use since 1968, and remains one of the most successful preventive interventions in obstetric medicine.

KEY COUNSELING POINTS

WHY RHIG MATTERS:

- RhIG is highly effective at prevention of maternal anti-D alloimmunization in RhD-negative mothers.
- Without RhIG, approximately 16% of RhD negative individuals carrying an RhD-positive infant become alloimmunized. Alloimmunization is permanent.
- Antenatal and postpartum RhIG prophylaxis reduces alloimmunization risk to 0.1%.
- Alloimmunization can cause hemolytic disease of the fetus and newborn (HDFN), which can lead to **fetal/neonatal anemia, hydrops fetalis, intrauterine transfusions (IUT), preterm birth, neonatal hyperbilirubinemia, fetal/neonatal death.**

EARLY PREGNANCY GUIDANCE

Professional society recommendations differ regarding routine RhIG administration after pregnancy loss or abortion before 12 weeks gestation.

American College of Obstetricians and Gynecologists (ACOG):

Routine Rh testing and RhIG may not be required for some pregnancy losses <12 weeks.

Society for Maternal-Fetal Medicine (SMFM):

Evidence is insufficient to definitively establish the safety of withholding RhIG; RhIG is recommended when it is not a barrier to care.

Patient advocacy groups support this position.

Know which RhIG product is carried in your clinic. Product half-life, dose timing, and dose preparation may differ. RhoGAM® Ultra-Filtered PLUS [Rho(D) Immune Globulin (Human)] (300 µg) has a half-life of 30.9 days. Administering RhIG inconsistently with manufacturer instructions can result in unintended alloimmunization.

TIMING OF RHIG ADMINISTRATION

ANTENATAL



Approximately 28 weeks gestation



POSTPARTUM



Within 72 hours after delivery of an RhD-positive infant

ADDITIONAL SENSITIZING EVENTS

Consider RhIG after:



VAGINAL BLEEDING



ABDOMINAL TRAUMA



INVASIVE PROCEDURES



ECTOPIC PREGNANCY



PREGNANCY LOSS



EXTERNAL CEPHALIC VERSION



RhIG should be administered as soon as possible after a sensitizing event. When in doubt, consult institutional guidelines or a transfusion medicine specialist.

RhIG prevents hemolytic disease of the fetus and newborn (HDFN), a serious high-risk condition in the fetus and neonate that cannot be prevented once antibodies are formed



IF ALLOIMMUNIZATION OCCURS, PRENATAL MANAGEMENT MAY INCLUDE:

- referral to maternal-fetal medicine
- serial antibody titers
- frequent middle cerebral artery (MCA) Doppler surveillance
- intrauterine blood transfusions
- monitoring for hydrops fetalis and fetal anemia

NEWBORNS AFFECTED BY HDFN MAY REQUIRE:

- NICU admission
- phototherapy
- intravenous immune globulin
- exchange transfusion
- blood transfusions
- prolonged laboratory monitoring after discharge

COMMON PATIENT CONCERNS AND SUGGESTED FRAMING

"I WANT AS NATURAL A PREGNANCY AS POSSIBLE."

RhIG is not a vaccine. It is an immunoglobulin medication designed to prevent permanent alloimmunization that can lead to highly medicalized pregnancies.

"IS RHIG SAFE?"

RhIG is a human plasma-derived product with decades of clinical use and established donor screening and manufacturing safeguards. You are welcome to read the package insert, and I can provide this to you.

"I'M WORRIED BECAUSE IT'S A BLOOD PRODUCT."

RhIG is a highly purified plasma product, not a whole blood product. It undergoes extensive donor screening, plasma testing and viral reduction procedures. Immune globulins, including RhIG, are cleared naturally by the immune system, reaching undetectable levels within 6 months.

"COULD I JUST WAIT AND DECIDE LATER?"

Once sensitization occurs, it cannot be reversed. Waiting may reduce effectiveness because sensitization occurs during exposure to baby's blood.

"WHAT WOULD HAPPEN IF I DIDN'T GET RHIG?"

We can't predict exactly what would happen but we do know that RhIG helps prevent your immune system from forming permanent antibodies against the RhD antigen which is found on an Rh-positive baby's red blood cells. Without RhIG, about 16% of Rh-negative individuals carrying an Rh-positive baby develop lifelong anti-D antibodies. Those antibodies can cross the placenta and cause destruction of baby's red blood cells. This disease in the baby is called HDFN, and it requires management by a high-risk specialist, frequent laboratory and ultrasound monitoring, and in about 13% of cases, invasive intrauterine blood transfusions. Additional transfusions are often needed after birth. Alloimmunization is a highly medicalized pregnancy and can cause fetal/neonatal loss due to HDFN.

"CAN I DO ANYTHING MORE NATURAL TO PREVENT THESE ANTIBODIES?"

No, before RhIG was invented, women developed antibodies and faced recurring child loss due to HDFN.



ALLO HOPE
FOUNDATION

IF RHIG IS DECLINED CONSIDER:

- documenting informed refusal
- reviewing risks of permanent alloimmunization
- discussing cffDNA fetal RhD testing when available
- revisiting discussion later in pregnancy and postpartum
- follow-up antibody screening 3-6 months after delivery

SCAN FOR:

- ✓ REFERENCES
- ✓ HAND OUTS
- ✓ RESOURCES

