

RH NEGATIVE AND RHOGAM

Rh D refers to an erythrocyte antigen which is a subtype of ABO blood groups. Women who carry the antigen are called Rh positive. Those without are Rh negative.

Alloimmunization occurs through fetomaternal hemorrhage (usually during delivery) when an Rh negative mom has an Rh + fetus. The mom's immune system forms antibodies against the Rh + fetus. So a subsequent pregnancy may be at risk if the fetus is Rh +. As listed below, there are other clinical situations in which mom may be exposed to the fetal Rh antigen causing sensitization.

An injection of RhoGam acts to block mom's antibodies from attacking the baby. Rh negative women should be given 300 ug of RhoGam at 28 weeks to prevent antenatal sensitization (so Rh - mom does not develop antibodies against Rh + baby). This significantly reduces the incidence of hemolytic disease of the newborn.

An antibody screen must be done prior to administration of RhoGam (within 2 weeks). A positive result means sensitization has occurred and RhoGam should not be given. A positive antibody screen requires further work up. Consider OB consult. RhoGam is given postpartum if baby is Rh positive.

Indication	Dose of RhoGam for Rh negative mom
Threatened Abortion	<13 weeks: 50 ug ≥13 weeks: 300 ug
Abortion (SAB/EAB)	<13 weeks: 50 ug ≥13 weeks: 300 ug
Ectopic Pregnancy	<13 weeks: 50 ug ≥13 weeks: 300 ug
Amniocentesis	300 ug
Chorionic Villi Sampling	300 ug
Percutaneous umbilical cord sampling	300 ug
Abdominal trauma or fetal death 2/3 trim	300 ug
Second or third trimester bleeding	300 ug
Antenatal prophylaxis (at 28 wks GA)	300 ug
Postpartum w/I 72 hours of birth if baby is Rh +	300 ug
Fetomaternal hemorrhage	300 ug covers up to 15 ml fetomaternal bleed. A Kleihauer-Betke test can be used to estimate the amount of fetal-maternal hemorrhage (i.e. especially in case of trauma)

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