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Evaluation and management of Rh(D) Negative Sensitization in Pregnancy

1. Definition or Key Clinical Information*: Occurs when an individual has no Rh proteins in their red blood cells. When exposed to the Rh protein in another individual's blood, like their baby when pregnant, their bodies will create antibodies to fight that protein and destroy the cell. Once sensitization has occurred, there is no getting rid of the antibodies. Generally, sensitization occurs during the third stage of labor or miscarriages. (*Costumbrado et al., 2021)

2. Assessment (Izetbegovic, S., 2013)

i. Risk Factors *Other gestational parent is Rh positive, hx or recurrent pregnancy loss, stillbirth, or neonatal death due to unknown causes, blood transfusion or pregnancy with no prophylaxis, and trauma or invasive procedure during pregnancy, birth, or third stage of labor.*

ii. Subjective Symptoms *May report their negative blood type, or getting a shot called Rhogam in their history.*

iii. Objective Signs *None besides lab work.*

iv. Clinical Test Considerations *A blood draw to run labs for ABO type, Rh factor, and antibody screen during initial labs.*

3. Management plan (Yoham & Casadesus., 2021)

i. Therapeutic measures to consider *Giving a Rhogam or Rh immunoglobulin shot at 28-30 weeks gestation and before 72 hours after birth if the baby's blood type is unknown or positive with informed consent. Alternative indications would be a miscarriage or invasive procedures.*

ii. Complementary measures to consider *be Good nutrition, support of normal placental attachment during preconception to early gestation, avoiding invasive procedures like amniocentesis and CVS, and gentle delivery of the placenta.*

iii. Considerations for pregnancy, delivery and lactation *Pregnancy is the only time besides accidental blood exposures like sharing needles or blood transfusions that Rh negative impacts a person's life. During delivery or a miscarriage, the birthing parent can be exposed to the Rh proteins and become sensitized, destroying that protein in the future, leading to miscarriages or stillbirths.*

iv. Client and family education *Provide education to the client about what it means to be Rh negative, prevention measures, risks and benefits, and prophylaxis. Assure a client that this is preventable with proper treatment of Rh immunoglobulin and proper follow-up. Educate that they will need the shots in each pregnancy and possibly every postpartum if their baby is Rh positive.*

v. Follow-up *If untreated, follow up 3 months postpartum and 6 months postpartum to evaluate sensitization. If treated, follow up within 72 hours postpartum for 2nd Rhogam dose if the baby is unknown or positive blood type.*

4. Indications for Consult, Collaboration or Referral *If the state doesn't allow a midwife scope to include Rhogam, then a referral to a PCP or OBGYN for the shot would be indicated. If there are recurrent miscarriages or stillbirths due to sensitization, then perhaps a referral to a fertility specialist to discuss donor sperm that is also Rh negative or therapy/counciling to help cope with the losses. Any abnormal result or sensitization would indicate a consult/referral to a n OB or MFM. The baby would be referred to their pediatrician or neonatology.*

5.References

Costumbrado, J., Mansour, T., & Ghassemzadeh, S. (2021). *Rh incompatibility*. Star Pearls [Internet]. https://www.ncbi.nlm.nih.gov/books/NBK459353/

Izetbegovic, S. (2013). Occurrence of ABO and RhD incompatibility with Rh-negative mothers. *Materia Socio Medica*, *25*(4), 255–259. https://doi.org/10.5455/msm.2013.25.255-258

Yoham, A., & Casadesus, D. (2021). *Rho(D) immune globulin*. Star Pearls [Internet]. https://www.ncbi.nlm.nih.gov/books/NBK557884/