Antenatal Treatment of Fetal Alloimmune Thrombocytopenia

General:

a. No more severe than index case
b. Intracranial hemorrhage (ICH) risk 7-26%
    i. 80% antepartum
    ii. 42% prior to 30 weeks' gestation
c. Higher risk
    i. Prior ICH
    ii. Prior ICH second trimester
d. Overall mortality rate 1-10%
e. Long-term complications 14-26%
    i. Neurologic sequelae
    ii. Cerebral palsy
    iii. Cortical blindness
    iv. Mental retardation

Determine incompatibility:

a. Mom 1b/1b
b. Dad 1a/1a or 1a/1b
c. Sister with incompatibility
d. Others
    i. 4a and 4b
    ii. 5a and 5b
e. Fetal amniocentesis
    i. Option if father is heterozygous

Maternal Prenatal Management:

a. No aspirin or nonsteroidal anti-inflammatories
b. Planned delivery

Standard Risk: Previous child with low platelets, no ICH

1. 20 weeks IVIG 1 gram per kg per week
2. 32 weeks IVIG 2 grams per kg per week, prednisone 0.5 mg per kg per day
3. 37-38 weeks
    a. Scheduled cesarean delivery following a completed course of betamethasone

High Risk: Previous child ICH third trimester or at birth

1. 12 weeks IVIG 2 grams per kg per week
2. 20 weeks IVIG 2 grams per kg per week
3. 28 weeks IVIG 2 grams per kg per week, prednisone 0.5 mg per kg per day

4. 35-36 weeks
    a. Scheduled cesarean delivery following a completed course of betamethasone

Highest Risk: Previous child ICH in second trimester

1. 12 weeks IVIG 2 grams per kg per week
2. 20 weeks IVIG 2 grams per kg per week, prednisone 1 mg per kg per day
3. 35-36 weeks
    a. Scheduled cesarean delivery following a completed course of betamethasone

References:

1. Pacheco LD, et al. Obstet Gynecol 2011;118:1157-63.
2. Espinoza JP, et al. Rev Obstet Gynecol 2013;6:e15-321.
3. ACOG Practice Bulletin #166. Thrombocytopenia in Pregnancy. September 2016.