

Unconjugated bilirubin levels from RBC breakdown may be extremely high postnatally. This can lead to kernicterus which is encephalopathy due to high bilirubin levels. There are several encephalopathic features including cerebral palsy.

Diagnosis

Positive Coombs Test

[Positive Comb](#)

If the newborn has signs of hemolysis postnatally, a Coombs test can be conducted. A Coombs test is an agglutination test used to detect hemolytic antibodies and/or complement proteins that are already bound to RBCs (direct) or unbound to anti-RBC antibodies in serum (indirect). Rh incompatibilities are associated with a positive Coombs test.

Ultrasound

[Ultrasound-machine](#)

Ultrasonography can be used in the diagnosis of Rh hemolytic disease of the newborn. An elevated flow rate of fetal blood vessels on doppler ultrasound can indicate anemia.

Management

RhoGAM [Anti-Rh(D) Immunoglobulin]

[Row-Groom](#)

Rh hemolytic disease of the newborn can be prevented by administering RhoGAM (anti-D prophylaxis) to Rh-negative women during the 3rd trimester and early postpartum period (if fetus is Rh-positive). This prevents maternal IgG anti-D production.

Intrauterine Blood Transfusion

[Blood Transfusion-IV in Uterus](#)

An intrauterine blood transfusion can be administered during the prenatal period as a treatment option for severe cases of anemia.

Phototherapy

[Photo-flash](#)

With postnatal treatment, phototherapy - and if necessary exchange transfusion with RBCs - can be used to address hyperbilirubinemia. Additionally, iron supplementation can aid in the symptoms of hemolytic anemia.

IVIG (Intravenous Immunoglobulin)

[Ivy-gold-goblin](#)

In severe cases, IVIG can be administered. IVIG essentially acts as a competitor to the rhesus antigen but does not cause hemolytic anemia. Thus it prevents native Rh antibodies from attacking fetal RBCs.