administered to decrease the formation of bilirubin in neonates with ABO incompatibility.

Prevention of Rh Isoimmunization

The administration of RhIg, a human gamma globulin concentrate of anti-D, to all unsensitized Rh-negative mothers at 28 weeks of gestation and after delivery or abortion of an Rh-positive infant or fetus prevents the development of maternal sensitization to the Rh factor. The injected anti-Rh antibodies are thought to destroy (by subsequent phagocytosis and agglutination) fetal RBCs passing into the maternal circulation before they can be recognized by the mother's immune system. Because the immune response is blocked, anti-D antibodies and memory cells (which produce the primary and secondary immune responses, respectively) are not formed (Bagwell, 2014; Blackburn, 2011). The inhibition of memory cell formation is especially important because memory cells provide long-term immunity by initiating a rapid immune response after the antigen is reintroduced (McCance and Huether, 2010).

To be effective, RhIg (e.g., RhoGAM) must be administered to unsensitized mothers within 72 hours (but possibly as long as 3 to 4 weeks) after the first delivery or abortion and repeated after subsequent pregnancies or losses. The administration of RhIg at 26 to 28 weeks of gestation further reduces the risk of Rh isoimmunization. RhIg is not effective against existing Rh-positive antibodies in the maternal circulation.

Studies have demonstrated the effectiveness of IVIG at decreasing the severity of RBC destruction (hemolysis) in HDN and subsequent development of neonatal jaundice (Elalfy, Elbarbary, and Abaza, 2011; Demirel, Akar, Celik, et al, 2011). This therapy, often used in conjunction with phototherapy, may decrease the necessity for exchange transfusion. Maternal administration of high-dose IVIG, alone or in combination with plasmapheresis, decreases the fetal effects of RhD isoimmunization (Bellone and Boctor, 2014).

Drug Alert

RhIg is administered intramuscularly, not intravenously, and only to Rh-negative women with a negative Coombs test result—never