

hemolytic disease of the fetus or newborn.¹⁴

The approach to identify newborns with maternal anti-erythrocyte antibodies and guide early management is outlined in Fig 1.¹⁵

KAS 1: If the maternal antibody screen is positive or unknown because the mother did not have prenatal antibody screening, the infant should have a direct antiglobulin test (DAT) and the infant's blood type should be determined as soon as possible using either cord or peripheral blood. (Aggregate Evidence Quality Grade B, Recommendation)

The DAT helps to identify infants at risk for hyperbilirubinemia attributable to hemolysis. DAT-negative infants may be managed with usual care. Mothers who received RhIG can have a positive antibody screen for anti-Rh(D), and RhIG can cause a positive DAT (anti-Rh[D]) in the infant but generally no hemolysis.¹⁶ If an infant's DAT is known to be positive only to anti-Rh(D) because the mother received RhIG during pregnancy and the

mother was known not to have Rh(D) antibodies before receiving RhIG, the infant can be treated as if the infant is DAT negative. However, any infant with a positive DAT attributable to an antibody other than anti-Rh(D) following maternal receipt of RhIG should be considered to be DAT positive.¹⁵

If the maternal blood type is Rh(D)–, the Rh type of the infant should be determined to assess the need for administration of RhIG to the mother. If the maternal blood is O+ and the maternal antibody screen is negative, it is an option to test the cord blood for the infant's blood type and/or DAT. Determining the infant's blood type or DAT is not necessary if bilirubin surveillance and risk assessment follows this clinical practice guideline and appropriate follow-up after discharge is arranged. Otherwise, this testing should be done.

B. Providing Feeding Support

Exclusive breastfeeding and hyperbilirubinemia are strongly associated.¹³ Jaundice in breastfed infants falls into 2 main categories, depending on its timing of onset.

These types of jaundice must be differentiated to guide appropriate management. Suboptimal intake can lead to hyperbilirubinemia, the so-called “breastfeeding jaundice,” which typically peaks on days 3 to 5 after birth and is frequently associated with excess weight loss. Because this type of jaundice, especially when excessive, is almost always associated with inadequate milk intake rather than breastfeeding per se, it is more correctly described as “suboptimal intake hyperbilirubinemia.”¹³ Breastfeeding fewer than 8 times per day has been associated with higher TSB concentrations.¹⁷ Low milk and low caloric intake contribute to decreased stool frequency and increased enterohepatic circulation of bilirubin.¹³ In contrast to suboptimal intake, hyperbilirubinemia that persists with adequate human milk intake and weight gain is referred to as “breast milk jaundice” or the “breast milk jaundice syndrome.” This cause of prolonged unconjugated hyperbilirubinemia, which can last up to 3 months, is almost always nonpathologic and not associated with direct or conjugated hyperbilirubinemia.¹³ One study found that 28 days after birth, 34%

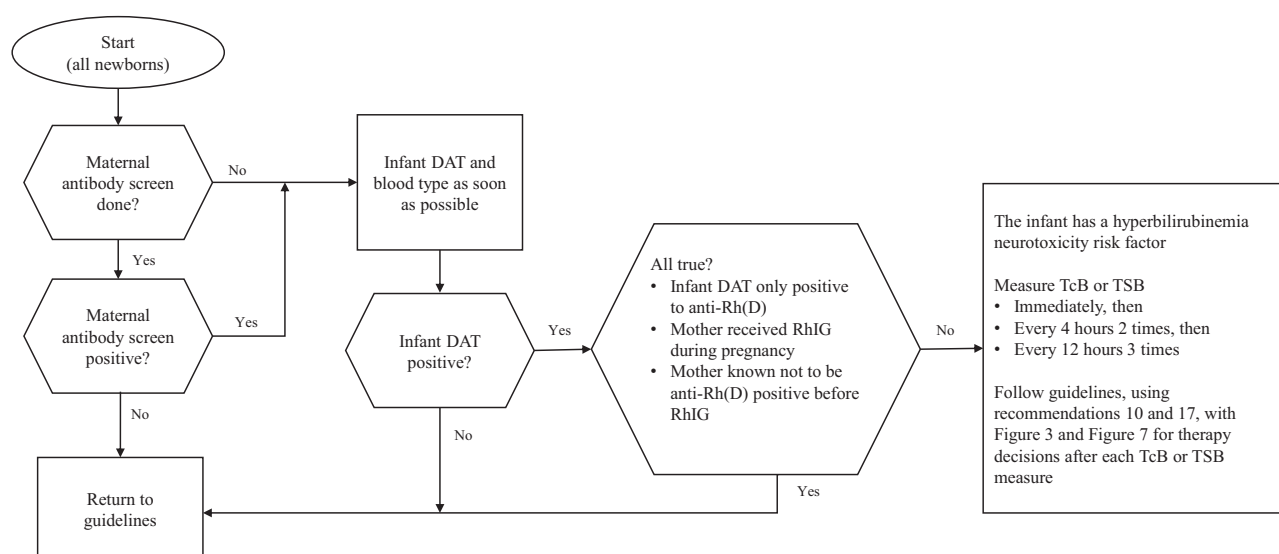


FIGURE 1

Approach to identify newborns with maternal anti-erythrocyte antibodies and to guide early management.¹⁵