

Editorial Note on Hemolytic Disease of the Newborn

Seung Mi*

Department of Obstetrics and Gynecology, Seoul National University College of Medicine, Korea

EDITORIAL NOTE

Reticulocytosis and anemia can occur in the fetus. The severity of this fetal disease varies from moderate to extreme, with the possibility of fetal death due to heart failure (hydrops fetalis). Reticulocytosis and anemia can affect the fetus. This fetal disease can vary in severity from mild to serious, and fetal death due to heart failure (hydrops fetalis) is a possibility. HDFN indicates a violation of the fetus' immune privilege or some other type of immune tolerance deficiency during pregnancy. The alloantigen that causes the answer is used to classify the different forms of HDFN. A positive direct Coombs test (also known as direct agglutination test), elevated cord bilirubin levels, and hemolytic anemia are all signs of newborn hemolytic disease. A newborn with this disease can develop neutropenia as well as neonatal alloimmune thrombocytopenia.

The neonate may develop acute or chronic kernicterus, much like other types of extreme neonatal jaundice, but the risk of kernicterus in HDN is higher due to the rapid and massive loss of blood cells. It's important to remember that isoimmunization raises the risk of neurotoxicity and lowers the risk of kernicterus. Kernicterus, hepatosplenomegaly, inspissated bile syndrome and/or greenish staining of the teeth, hemolytic anemia, and liver damage due to excess bilirubin are all possible complications of HDN. Acquired hemolytic anemia, congenital toxoplasma, and congenital syphilis infection are all conditions that can cause similar symptoms in newborns. When the body is exposed to an antigen that is alien to the body's make-up, antibodies are formed. If a mother is exposed

to a foreign antigen and releases IgG (as opposed to IgM, which does not cross the placenta), the IgG will target the antigen and may impact the fetus in utero and after delivery.

Treatment

After birth, treatment can include temperature control and monitoring, phototherapy, transfusion with compatible packed red blood, exchange transfusion, sodium bicarbonate for acidosis correction, and/or assisted ventilation, depending on the severity of the condition.

Transfusion reactions

If a woman has antibodies, she is at a high risk of having a transfusion reaction in the future if she needs blood. As a result, she must wear a medical warning card at all times and disclose her antibody status to all physicians and emergency personnel. However, the absence of antibodies does not rule out the possibility of a transfusion reaction in a woman: Immune-mediated or non-immune-mediated acute hemolytic transfusion reactions are both possible. Immune-mediated hemolytic transfusion reactions triggered by anti-A, anti-B, or anti-A,B immunoglobulin M (IgM) anti-A, anti-B, or anti-A,B immunoglobulin M (IgM) anti-A, anti-B, or anti-A,B immunoglobulin M (IgM) anti-A, anti-B, or anti-A,B immunoglobulin M (IgM). Patients with no antibodies detectable by routine laboratory procedures can experience acute hemolytic transfusion reactions due to immune hemolysis.

Correspondence to: Seung Mi, Department of Obstetrics and Gynecology, Seoul National University College of Medicine, Korea. E-mail: jhs092@snu.ac.kr

Received: May 10, 2021, **Accepted:** May 15, 2021, **Published:** May 20, 2021

Citation: Mi S (2021) Editorial Note on Hemolytic Disease of the Newborn. J Neonatal Biol. Vol:10 Iss:5: 292

Copyright: © 2021 Mi S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.