



Treatment Strategies for Neonatal Lupus Erythematosus

Deborah Friedman*

Department of Nursing, Dalarna University, Falun, Sweden

DESCRIPTION

Neonatal Lupus Erythematosus (NLE) is a rare autoimmune disorder that affects newborns. It is a condition that is passed from the mother to the baby during pregnancy [1]. The mother's antibodies cross the placenta and attack the baby's tissues, causing a range of symptoms. NLE can affect various organs, including the skin, heart, liver, and blood [2].

The cause of NLE is not entirely understood, but it is believed to be an autoimmune response. The mother's immune system mistakenly identifies the baby's tissues as foreign and produces autoantibodies against them [3]. These autoantibodies can cross the placenta and cause damage to the baby's tissues.

NLE is a relatively rare condition, affecting approximately 1 in 20,000 to 1 in 30,000 live births. It is more common in females than males, and it is most commonly seen in infants born to mothers with autoimmune diseases such as Systemic Lupus Erythematosus (SLE) [4].

NLE can cause a range of symptoms that may be mild or severe. The most common symptoms of NLE include skin rashes, which may appear as a red, scaly, or raised rash [5]. These rashes are typically located on the face, scalp, chest, and arms. In addition to skin rashes, NLE can also cause liver problems, heart block, and low blood counts [6].

Liver problems NLE can cause liver inflammation, which can lead to liver damage. Infants with NLE may have a yellowing of the skin and eyes (jaundice), poor feeding, and an enlarged liver. Heart block NLE can cause problems with the heart's electrical system, resulting in heart block [7]. This condition can cause the baby's heart rate to slow down and can be life-threatening. Low blood counts NLE can cause a decrease in the number of red blood cells, white blood cells, and platelets in the baby's blood [8]. This can lead to anemia, infections, and bleeding problems.

The diagnosis of NLE is made based on the baby's symptoms, medical history, and laboratory tests. The mother's medical

history is also important, as NLE is more common in mothers with autoimmune diseases such as SLE.

Antinuclear Antibody (ANA) test-This test measures the presence of autoantibodies in the baby's blood. **Anti-SSA/Ro and anti-SSB/La tests** these tests measure the presence of specific autoantibodies that are commonly associated with NLE [9].

Complete Blood Count (CBC)-This test measures the number of red blood cells, white blood cells, and platelets in the baby's blood. **Liver function tests** these tests measure the levels of certain enzymes and proteins in the baby's blood that can indicate liver damage [10]. **Electrocardiogram (ECG)** this test measures the electrical activity of the baby's heart and can detect heart block.

The treatment of NLE depends on the severity of the baby's symptoms. Mild cases of NLE may not require any treatment, and the symptoms may resolve on their own over time. However, severe cases of NLE may require treatment to manage the symptoms and prevent complications. Skin rashes Mild skin rashes may be treated with topical creams and ointments. Severe skin rashes may require oral medications such as corticosteroids. Liver problems infants with liver problems may require hospitalization and treatment with medications to reduce inflammation and prevent further liver damage.

REFERENCES

1. Moak JP, Barron KS, Hougen TJ, Wiles HB, Balaji S, Sreeram N, et al. Congenital heart block: development of late-onset cardiomyopathy, a previously underappreciated sequela. *J Am Coll Cardiol.* 2001;37(1):238-242.
2. Nield LE, Silverman ED, Taylor GP, Smallhorn JF, Mullen JB, Silverman NH, et al. Maternal anti-Ro and anti-La antibody-associated endocardial fibroelastosis. *Circulation.* 2002; 105(7): 843-848.
3. Brucato A, Frassi M, Franceschini F, Cimaz R, Faden D, Pisoni MP, et al. Risk of congenital complete heart block in newborns of mothers with anti-Ro/SSA antibodies detected by counterimmunoelectrophoresis: a prospective study of 100 women.

Correspondence to: Deborah Friedman, Department of Nursing, Dalarna University, Falun, Sweden, E-mail: 89348f@mail.com

Received: 28-Feb-2023, Manuscript No. JNB-23-20672; **Editor assigned:** 03-Mar-2023, Pre QC No. JNB-23-20672(PQ); **Reviewed:** 20-Mar-2023, QC No. JNB-23-20672; **Revised:** 24-Mar-2023, Manuscript No. JNB-23-20672(R); **Published:** 31-Mar-2023, DOI: 10.35248/2167-0897.23.12.405.

Citation: Friedman D (2023) Treatment Strategies for Neonatal Lupus Erythematosus. *J Neonatal Biol.* 12:405.

Copyright: © 2023 Friedman D. 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.

- Arthritis Rheum. 2001;44(8):1832-1835.
4. Julkunen H, Eronen M. The rate of recurrence of isolated congenital heart block: A population-based study. *Arthritis Rheum.* 2001;44(2): 487-488.
 5. Glickstein JS, Buyon J, Friedman D. Pulsed Doppler echocardiographic assessment of the fetal PR interval. *Am J Cardiol.* 2000; 86(2):236-239.
 6. Blanford AT, Murphy BE. *In vitro* metabolism of prednisolone, dexamethasone, betamethasone, and cortisol by the human placenta. *Am J Obstet Gynecol.* 1977; 127(3):264-267.
 7. Clancy RM, Backer CB, Yin X, Kapur RP, Molad Y, Buyon JP. Cytokine polymorphisms and histologic expression in autopsy studies: contribution of TNF- α and TGF- β 1 to the pathogenesis of autoimmune-associated congenital heart block. *J Immunol.* 2003; 171(6):3253-3261.
 8. Askanase AD, Friedman DM, Copel J, Dische MR, Dubin A, Starc TJ, et al. Spectrum and progression of conduction abnormalities in infants born to mothers with anti-SSA/Ro-SSB/La antibodies. *Lupus.* 2002;11(3):145-151.
 9. Luo Y, Zhang L, Fei Y, Li Y, Hao D, Liu Y. Pregnancy outcome of 126 anti-SSA/Ro-positive patients during the past 24 years-a retrospective cohort study. *Clin Rheumatol.* 2015;34:1721-1728.
 10. Xiao Z, Hang H, Dai H, Yan B. A case of neonatal lupus erythematosus with a typical malar rash. *Rheumatology.* 2014;53(6): 1152-1154.