



Treatment Strategies for Neonatal Lupus Erythematosus

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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.

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