Neonatal lupus erythematosus

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A 5-week-old infant boy presented to the dermatology department with a 3-week history of annular plaques. The patient had multiple papules and annular plaques with a raised border on his scalp and face (Figure 1). His mother had an uncomplicated pregnancy, although she had a history of systemic lupus erythematosus. She had no flares during pregnancy and was not on medication.

The patient had normal white blood cell counts and renal function but increased levels of alanine transaminase (67.5 [normal range, 0–40] U/L) and aspartate transaminase (73.6 [normal range, 0–40] U/L). Results for testing for antinuclear antibodies were positive (1:1280 titre in speckled pattern), and strongly positive for anti-SSA/Ro and anti-SSB/La autoantibodies. Results for abdominal ultrasonography (conducted at the mother's request to rule out other adominal diseases) and electrocardiography were normal. His mother tested positive for ANA with a (1:1280 titre in speckled pattern), and strongly positive for anti-SSA/Ro and anti-SSB/La autoantibodies.

We diagnosed neonatal lupus erythematosus and advised that sun protection be used but did not suggest other interventions. At 3-month follow-up, the patient's lesions had gradually resolved and levels of liver enzymes had decreased.

Neonatal lupus erythematosus is an uncommon acquired autoimmune disease caused by the passive transfer of autoantibodies, especially anti-Ro and anti-La autoantibodies, across the placenta. Mothers usually have known or undiagnosed autoimmune diseases with circulating autoantibodies.[1] Clinical manifestations of neonatal lupus erythematosus, commonly affecting the skin and heart, can be present at birth or several weeks after birth.[2] Erythematous patches or plaques in annular or discoid shape usually affect sun-exposed areas; in some cases, periocular erythema (raccoon-eye appearance) may occur, which is considered a distinctive feature.[3] Congenital heart block is a severe complication, sometimes causing fetal death or necessitating insertion of a permanent pacemaker.

Differential diagnosis includes congenital syphilis, tinea corporis, sarcoidosis, granuloma annulare, Sweet syndrome and urticaria. Noncardiac manifestations usually resolve with clearance of the maternal autoantibodies. Rheumatic or autoimmune diseases may subsequently develop in childhood, and follow-up is suggested until adolescence.[4] The risk of neonatal lupus erythematosus in children of future pregnancies is increased (36%–49%).[5]

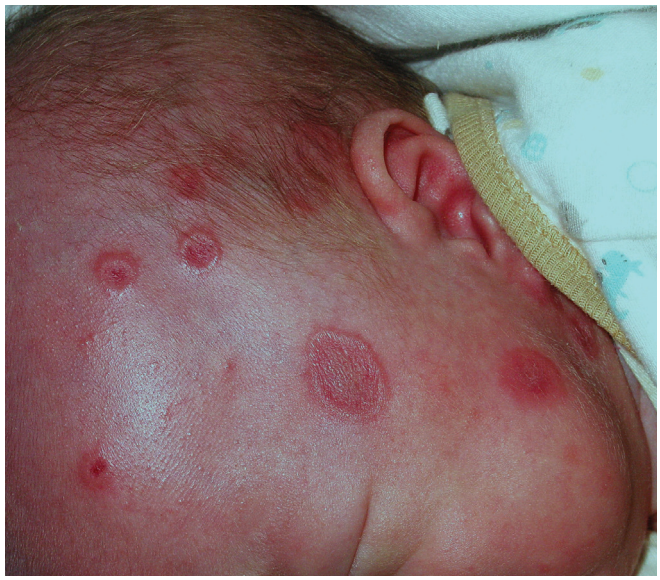

Figure 1: Multiple erythematosus papules and annular plaques with a raised border on the face and scalp of a 5-week-old boy with neonatal lupus erythematosus.

References

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