

## Diaper Dermatitis and Pancytopenia as the Primary Manifestation in an Infant with Vitamin B12 Deficiency

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**Abstract :** Female, 7 months old, daughter of a mother with anemia during pregnancy, with no history of atopy in the family, since birth she presents with recurrent dermatological and gastrointestinal infections, chronically treated for recurrent diaper dermatitis. At 6 months of age, she begins with generalized pallor, hyperpigmentation in hands and feet, smooth tongue, psychomotor retardation with lack of head support, sedation, and hypoactivity. She was referred to our hospital for a fever of 38°C, severe diaper rash, and pancytopenia with HB 9.3, platelets 38000, neutrophils 0.39 MCV: 86.80 high for her age. The approach was initiated to rule out myeloproliferative syndrome, with negative immunohistochemical results of bone marrow aspirate; during her stay, she presented neurological regression, lack of sucking, and focal seizures. CT scan showed cortical atrophy. The patient was diagnosed with primary immunodeficiency due to history; gamma globulin was administered without improvement with normal results of immunoglobulins and metabolic screening. When dermatological and neurological diagnoses were ruled out as the primary cause, a nutritional factor was evaluated, and a therapeutic trial was started with the administration of vitamin B12 and zinc, presenting clinical neurological improvement and resolution of pancytopenia in 2 months. It was decided to continue outpatient management. Discussion: We present a patient with neurological, dermatological involvement, and pancytopenia, so the most common differential diagnoses in this population were ruled out. Vitamin B12 deficiency is an uncommon entity. Due to maternal and clinical history, a therapeutic trial was started resulting in an improvement. Conclusion: Vitamin B12 deficiency should be considered one of the differential diagnoses in the approach to pancytopenia with megaloblastic anemia associated with dermatologic and neurologic manifestations. Early treatment can reduce irreversible damage in these patients.

**Keywords :** vitamin B12 deficiency, pediatrics, pancytopenia, diaper dermatitis

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