Even when laboratory parameters are all within normal values, the clinical condition should encourage us to research B12 deficiency. Early recognition of these infants is important because this condition is partially reversible and can aid in preventing the progression of irreversible deficits. More importantly, vitamin B12 supplementation of pregnant women may help prevent neurological findings in infants.

**NEUROLOGICAL FINDINGS OF VITAMIN B12 DEFICIENCY IN INFANCY**

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Vitamin B12 is essential for the development of the central nervous system.

The lack of the vitamin B12 leads to neurological symptoms developing more rapidly in the first year of life. The most common neurologic symptoms observed during infancy are apathy, developmental delay or retardation, involuntary movements, hypotonia, and seizures. In our study, the objective was to determine the neurological symptoms and signs of vitamin B12 deficiency in children and to emphasize the consequences of early diagnosis and treatment.

A retrospective study was performed over the period 2017-2020 at a third level research and training hospital in Turkey. We studied 43 infants aged 1 to 24 months with vitamin B12 deficiency who were hospitalized and treated for other diseases in the paediatrics department of the hospital. The diagnosis of vitamin B12 deficiency was based on haematological values, a low serum vitamin B12 level, a normal level of folic acid, and a high serum homocysteine levels. Complete blood count, serum vitamin B12, folic acid, ferritin, homocysteine, NH3, and lactate dehydrogenase levels were measured in all patients, along with serum vitamin B12 levels in their mothers.

The mean age of 27 male and 16 female patients was determined as 6.5±4.03 (1–15 months) months. The most common symptom was afebrile seizures. This was followed by weakness and tremor. Optic atrophy was detected on the ophthalmoscopic examination of one of the patients with convulsions. On neurologic examination, the most common finding was apathy. Hypotonia, involuntary movements and lack of eye contact were also observed.

Retrospectively extra neurologic findings were observed in 25 patients. Most of these had pallor (11), 5 had failure to thrive, 5 had hyperpigmentation of skin, 4 had glossitis, and 1 had jaundice. Anaemia was determined in 37.2% of the cases. Bicytopenia was determined in 9.3% of patients, thrombocytopenia in 4.7%, and pancytopenia was found in 2.3% of patients.

In conclusion, vitamin B12 is important for development of the brain and nutritional deficiencies are common, especially in developing countries.

Most of them occur in exclusively breast-fed infants of deficient mothers.