



Vitamin B12 Deficiency (Pernicious Anemia)

Folic Acid Deficiency

Description:

Vitamin B12 and folic acid are essential for functional hematopoiesis. A severe deficiency leads to characteristic alterations in the complete blood count and serum chemistry panel: a profoundly macrocytic anemia, leukopenia, thrombocytopenia, and markedly elevated lactate dehydrogenase (LDH) levels. Etiological factors include insufficient dietary intake due to malnutrition or anorexia nervosa, or impaired intestinal absorption, such as in atrophic gastritis resulting in intrinsic factor deficiency.

Diagnostics:

Determination of serum vitamin B12 and folic acid concentrations.

Treatment:

Supplementation with appropriate preparations (e.g., Erycytol, Folsan) in accordance with regulatory approvals.

References:

Thomas L, Labor und Diagnose, 2023, Release 5: <https://www.labor-und-diagnose.de/index.html>

Parameterkatalog des Klinischen Instituts für Labormedizin, Med.Univ.Wien und AKH Wien:

<https://www.akhwien.at/default.aspx?pid=3982>

Leistungsverzeichnis der Klinischen Chemie, Univ.Klinikum Ulm:

<https://www.uniklinik-ulm.de/zentrale-einrichtung-klinische-chemie/leistungsverzeichnis.html>