

Vitamin B12 Deficiency - A referenced look at Psychiatric symptoms presenting before anaemia. (part 1 of 2)

1929 McAlpine said: "Mental changes occur not uncommonly in Pernicious Anaemia. They range from states of depression accompanied by loss of mental energy to definite psychoses. They, like the nervous system's symptoms, may precede the characteristic changes in the blood by many months. More frequent examination of the gastric contents and of the blood, especially for the presence of megalocytosis, is called for in primary neuroses and psychoses occurring after the age of 35, in view of the favourable results that may follow adequate treatment instituted at an early stage"

1933 Greenfield and O'Flynn found 14% of 45 patients with subacute combined degeneration of the spinal cord had normal peripheral blood counts

1956 "Cerebral Manifestations of Vit B12 Deficiency" with/without anaemia

www.ncbi.nlm.nih.gov/pmc/articles/PMC2035923/pdf/brmedj03185-0020.pdf

1981 B12 deficiency and psychiatric disorders: case report and literature review.

("Several of the patients were not anaemic and had no neurologic deficit")

www.ncbi.nlm.nih.gov/pubmed/7013836

1983 Organic psychosis without anaemia or spinal cord symptoms in patients with vitamin B12 deficiency.

"They emphasise that psychiatric manifestations may be the first symptoms of vitamin B12 deficiency and thus antedate anaemia and spinal cord disease."

www.ncbi.nlm.nih.gov/pubmed/6849439

1985 Masked vitamin B12 and folate deficiency in the elderly.

"There is a case for routine screening of the elderly for vitamin B12 and folate deficiency irrespective of the MCV."

www.ncbi.nlm.nih.gov/m/pubmed/3870687/?i=6&from=/9292759/related

1988. What are the psychiatric manifestations of vitamin B12 deficiency?

"slow cerebration; confusion; memory changes; delirium, with or without hallucinations and/or delusions; depression; acute psychotic states; and (more rarely) reversible manic and schizophreniform states."

www.ncbi.nlm.nih.gov/pubmed/3057051

1988 Neuropsychiatric disorders caused by cobalamin deficiency in the absence of anaemia or macrocytosis.

"Among 141 consecutive patients with neuro-psychiatric abnormalities due to cobalamin deficiency, we found that 40 (28 percent) had no anemia or macrocytosis"

www.ncbi.nlm.nih.gov/pubmed/3374544

1990 Relationship of normal serum vitamin B12 and folate levels to cognitive test performance in subtypes of geriatric major depression.

"Metabolic factors including vitamin B12 may play specific roles in the cognitive dysfunctions of different geropsychiatric disorders."

www.ncbi.nlm.nih.gov/m/pubmed/2206265/

2000. "Vitamin B12 levels are low in hospitalized psychiatric patients."

("Vitamin B12 deficiency is common in chronically ill psychotic patients with adequate nutrition and is not readily detected by routine hematology tests.")

<http://www.ncbi.nlm.nih.gov/m/pubmed/10857271/>

2003 Psychiatric manifestations of vitamin B12 deficiency: a case report.

"Mental or psychological changes may precede haematological signs by Months or Years"

www.ncbi.nlm.nih.gov/m/pubmed/15029091/

2003 Gastric atrophy, metaplasia, and dysplasia: a clinical perspective.

"Patients may have advanced neuropsychiatric manifestations of cobalamin deficiency and yet not be anemic, have a normal blood smear, and even have serum cobalamin levels in the normal range."

www.ncbi.nlm.nih.gov/m/pubmed/12702963/

2003 Catatonia and other psychiatric symptoms with vitamin B12 deficiency.

Importance of B12 estimation and replacement in patients with varied psychiatric manifestations.

www.ncbi.nlm.nih.gov/m/pubmed/12823174/?i=3&from=b12%20AND%20catatonia

2007 Postoperative dementia: toxicity of nitrous oxide.

"Through this observation, the authors underline the necessity to search for vitamin B12 deficiency in the case of cognitive features following general anaesthesia."

www.ncbi.nlm.nih.gov/m/pubmed/17457299/



Vitamin B12 Deficiency - A referenced look at Psychiatric symptoms presenting before anaemia. (part 2 of 2)

2009. Malignant catatonia in a patient with bipolar disorder, B12 deficiency, and neuroleptic malignant syndrome: one cause or three?

Maybe all this young patient needed was the correct treatment regimen for her late diagnosed B12 Deficiency
www.ncbi.nlm.nih.gov/m/pubmed/19820558/?i=1&from=b12%20AND%20catatonia

2009 Psychotic disorder and extrapyramidal symptoms associated with vitamin B12 and folate deficiency.

B12 deficiency-psychotic disorder, extrapyramidal symptoms in a 12-year-old boy
www.ncbi.nlm.nih.gov/m/pubmed/19095695/?i=2&from=b12%20AND%20catatonia

2012. Psychotic disorder, hypertension and seizures associated with vitamin B12 deficiency: a case report.

".....vitamin B(12) level should be checked in patients who do not have an obvious cause for psychosis, seizures or hypertension."
www.ncbi.nlm.nih.gov/m/pubmed/22027500/?i=2&from=B12%20psychosis%20AND%20%22blood%20was%20normal%22

2013. Association between vitamin b12 levels and melancholic depressive symptoms: a Finnish population-based study.

"The vitamin B12 level was associated with melancholic DS but not with non-melancholic DS."
www.ncbi.nlm.nih.gov/pubmed/23705786

2013 Vitamin B12 deficiency presenting as an acute confusional state: a case report and review of literature. (With anaemia)

"Total resolution of the psychiatric symptoms occurred following parenteral vitamin B12 replacement therapy."
www.ncbi.nlm.nih.gov/m/pubmed/24250331/?i=1&from=b12%20and%20delirium

2013 Polyglandular autoimmune syndrome disguised as mental illness.

"The diagnosis of her endocrinopathies were likely delayed for many years due to the psychiatric disorder..."
www.ncbi.nlm.nih.gov/pubmed/23632176

2013 Delirium as a result of vitamin B12 deficiency in a vegetarian female patient.

"The neuropsychiatric symptoms may be concurrent or precede the other symptoms."
www.ncbi.nlm.nih.gov/pubmed/23859997

2013 Cobalamin deficiency: clinical picture and radiological findings.

"Neuropsychiatric symptoms may precede hematologic signs"
www.ncbi.nlm.nih.gov/pubmed/24248213

2013 Decreased whole-blood global DNA methylation is related to serum hormones in anorexia nervosa adolescents.

"DNA methylation is modestly albeit significantly reduced in #anorexic adolescents"
www.ncbi.nlm.nih.gov/pubmed/24286295

2013 Vitamin B12 supplementation in treating major depressive disorder: a randomized controlled trial.

"Vitamin B12 supplementation with antidepressants significantly improved depressive symptoms in our cohort."
www.ncbi.nlm.nih.gov/pubmed/24339839

2013 Vitamin B12 deficiency presenting as an acute confusional state: a case report and review of literature.

www.ncbi.nlm.nih.gov/pubmed/24250331

2014 The neurology of folic acid deficiency.

"In both deficiency states [b12/folate] there is often dissociation between the neuropsychiatric and the hematologic complications."
www.ncbi.nlm.nih.gov/pubmed/24365361