Recurrent Reversible Jaundice, Neuropsychiatric Manifestations, Dementia and Ataxia as Manifestations of Vit. B12 Deficiency

Sir,

Vitamin B12 deficiency can present with involvement of the skin, mucous membrane, neurological and hematological systems.1,3 The Neurological symptoms may be episodic or progressive depending on the etiology and intake.2 We present here an interesting case of a 36 year old vegetarian, non alcoholic Hindu male businessman, born of a nonconsanguous marriage who had a history of yellowish discoloration of conjunctiva and urine. It was not associated with fever or signs of liver failure and lasted for about two weeks. After 15 days of this symptom he developed complaints of forgetfulness, irritability, disorientation to time and place, insomnia and in-coordination of all limbs which progressed over 3-4 weeks and then became static. On examination he had icterus but no lymphadenopathy or hepatosplenomegaly. There was no K.F. ring on slit lamp examination. His MMSE score was 20/30. He had impaired attention, judgement, recent memory and calculation. Oculi fundi were normal. All deep tendon reflexes were exaggerated and planter were bilaterally flexor. Bilateral knee-heel test and finger-nose test was abnormal (with eye closure), pseudoathetosis was present and Rhomberg’s test was positive. There was no truncal ataxia, nystagmus, saccadic or pursuit abnormality and also there was no pendular jerk or hypotonia.

Patient had a similar history 3 years back when he developed yellowish discoloration of conjunctiva and urine. It was not associated with fever, loose motion, steatorrhoea, itching, pain abdomen, hematemesis, melena or vomiting. He took some medications for the above mentioned symptoms, details of which were not available. Jaundice lasted for about twenty days. One month later he developed incoordination of limbs, dysarthria, forgetfulness mainly for recent events, irritability and suspicious behaviour. Symptoms progressed for 3-4 weeks and then became static. The treating physician at that time suspected him to be suffering from Wilson’s disease and investigated accordingly with a C.T. Scan of head, serum copper, ceruloplasmmin, 24 hour urine copper. KF ring was negative. His symptoms completely improved after three months.

Investigations done this time revealed a haemoglobin of 9.1 gm%, total leucocyte count of 4,500 with N \text{70.0}, \text{L} \text{30.0}, \text{M} \text{3.0}, \text{E} \text{2.0}. There were no hypersegmented neutrophils. Platelet count was 1 lakh, MCV = 103.1 fl and reticulocyte count of 4.8%. Total serum bilirubin was 7.7 mg% with indirect bilirubin of 6.6 mg% and direct bilirubin was 1.1 mg%. SGOT, SGPT were within normal limit. HBsAg, HCV, HIV, was negative. Bone marrow examination showed megaloblastic picture. Ultrasound of abdomen was normal. MRI cranium showed mild diffuse cerebral atrophy. Serum B\text{12} level was 67 pg/ml and homocysteine level was 60 nmol/ml. Antiparietal cell antibodies were positive, IF was negative, and gastric biopsy revealed feature of chronic gastritis with metaplasia.

Patient was given injection vitamin B\text{12}, 1000 mg intramuscular daily for 7 days, followed by weekly for four weeks and then monthly thereafter. Symptoms started improving after 1 week of treatment, with complete resolution of symptom after 1 month.

This case highlights the importance of recognizing vitamin B12 deficiency as an important inexpensive treatable cause in patients presenting with recurrent reversible jaundice, dementia and ataxia.

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