REFERENCES

1. Shamir R. Advances in celiac disease. Gastroenterol Clin North Am 2003; 32: 931-947.
2. Yachha S K, Misra S, Malik A K, Nagi B, Mehta S K. Spectrum of malabsorption syndrome in north indian children. Indian J Gastroenterol 1993; 12: 120-125.
3. Patwari A K, Anand V K, Kapur G, Narayanan S. Clinical and nutritional profile of children with celiac disease. Indian Pediatr 2003; 40: 337-342.

Wilson's Disease Presenting as Depressive Disorder

A 11-year-old girl was admitted with abnormal movements involving the left side of the body. Her symptoms started 9 months back when her father died. She became moody, irritable and lost interest in play and activities. She developed excessive fears, crying spells and disturbed sleep. She had loss of appetite and started losing weight. Her handwriting and academic performance deteriorated. The symptoms gradually increased and she was taken to a psychiatrist. A diagnosis of reactive depression was made and she was put on fluoxetine and thioridazine. About 4 months later she developed the abnormal movements and was admitted to our hospital.

She was born of non-consanguineous parents. She had normal developmental milestones and average academic performance before the illness. There was no past history of jaundice and no family history of any significant illness. On examination the child was conscious with occasional jerky movements of limbs. Her cranial nerves and optic fundi were normal. There was hypertonia involving all four limbs, slurred speech and ataxic gait. Deep tendon and plantar reflexes were normal with no sensory or cerebellar signs. Mental status examination revealed depressive features like depressed mood, prolonged reaction time, crying spells and ideas of hopelessness and worthlessness. There were no psychotic symptoms and her primary mental functions were intact. A diagnosis of major depressive disorder as per the DSM IV diagnostic criteria(1) and thioridazine-induced extra pyramidal symptoms was made.

The extrapyramidal symptoms persisted even after stopping thioridazine. Hence the possibility of organic extrapyramidal lesions was considered. Ophthalmology examination revealed bilateral KF rings, which pointed to the diagnosis of Wilson's disease. Investigations were also suggestive of Wilson's disease(2,3). Her serum ceruloplasmin level was very low and serum copper normal. Her complete blood count, ESR and peripheral smear were normal. Urine copper estimation could not be done due to technical reasons. Ultrasound scan showed increased echotexture of liver with no enlargement. The liver function tests were normal. CT scan head showed mild cerebral atrophy and hypo dense lesions involving the brain stem and putamen.

She was advised copper free diet and started on zinc 200 mg daily initially,

followed by D-penicillamine (250 mg twice daily), after one month, as initial treatment with penicillamine is reported to worsen neurological symptoms in these children (4). There was striking clinical improvement. The jerky movements disappeared after 6 months and academic performance gradually improved. KF rings disappeared completely after one and a half years.

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REFERENCES

1. American Psychiatric Association: Diagnostic and statistical manual of mental disorders, Ed.4 (DSM-IV) Washington DC: American Psychiatric Association; 1994.
2. Kalra. V, Khurana. D, Mittal. R. Wilson's Disease- Early Onset and lessons from a Pediatric cohort in India. Indian Pediatr 2000; 37: 595-601.
3. Oder W, Prayer L, Grimm G, Spatt J, Ferenci P, Kollegger H, *et al.,* Wilson's disease: evidence of subgroups derived from clinical findings and brain lesions. Neurology. 1993; 43: 120-124.
4. Koeller D. Metal Metabolism Disorders. In McIntosh. N, Helms. P, Smyth. R. Editors. Forfar and Arneil's Textbook of Pediatrics. 6th Ed. Edinburgh: Churchill Livingstone; 2003. p. 1190-1193.