Infantile Tremor Syndrome: Still A Mystery!

With reference to the recent publication in *Indian Pediatrics* [1], infantile tremor syndrome may indeed be 'down' perhaps in terms of incidence, but certainly not 'out' in terms of etiology. Authors found low serum vitamin B_{12} only in 8 of 16 infants and they are justifiably cautious in stating that vitamin B_{12} deficiency is "causally associated". There was initial worsening of tremors seen in six of their patients in spite of vitamin B_{12} therapy.

The quest for the cause of this syndrome of tremors, pigmentation, anemia and regression of milestones, seen in breastfed infants of vegetarian mothers is by no means over. We had earlier called it Infantile 'meninoencephalitic' syndrome [2]. Vitamin B_{12} deficiency may be an important associated factor in the biochemical process resulting in the syndrome [3], but is unlikely to be its cause by itself. In one of our studies [4], we have shown associated increase in the number of bands and heavy concentration of some amino acids and their metabolic products on serum and urine chromatography, when we compared it to age-matched norms. Interestingly, methylmalonic aciduria and homocystinuria have been demonstrated in Vitamin B_{12}-deficient patients [5].

A word of caution is needed about the belief that it is an entirely self-limited, transient entity, completely responsive to therapy. A follow-up study of 2 to 10 years carried out by us [6] showed that as many as 18 out of 23 infants recorded low scores on IQ tests during follow-up; twelve scored an IQ below 70, with poor scholastic performance reported by parents. Speech defects were present in a third of all; dyslalia was present in the majority (6 out of 7), and one had stammering. All infants had shown initial recovery in the disappearance of tremors, anemia and pigmentation irrespective of any specific therapy other than improved diet and general nutritional support at the onset of the disease. We are not aware of any other similar long-term studies.

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REFERENCES

1. Goraya JS, Sukhjot Kaur. Infantile tremor syndrome – Down but not out. Indian Pedatr. 2015;52:249-50.
2. Pohowalla JN, Kaul KK, Bhandari NR, Singh SD. Infantile "meningoencephalitic" syndrome. Indian J Pediatr. 1960;27:49-54.
3. Kaul KK, Prasan NG, Chowdhry RM. Some clinical observations and impressions on a syndrome of tremors in infants from India. J Pediatr. 1963;1:1158-66.
4. Kaul KK, Belapurkar KM, Parekh P. Syndrome of mental retardation, tremors, pigmentation and anemia in infants – some biochemical observations. Indian J Med Res. 1973;61:86-92.
5. Higginbotham MC, Sweetman L, Nyhan WL. A syndrome of methylmalonic aciduria, homocystinuria, megaloblastic anemia and neurologic abnormalities in a Vitamin B12 deficient breast fed infant of a strict vegetarian mother. N Engl J Med. 1978;299:317-23.
6. Kaul KK, Belapurkar KM, Parekh P. The syndrome of tremors in infants: A long follow up. Indian J Med Res. 1972;60:1067-72.