

Micronutrient deficiency in a child with autism spectrum disorder

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ABSTRACT

Introduction: Micronutrients deficiency is prevalent among children with autism due to sensory food aversion. Here we will describe a boy with autism and food selectivity, who presented with scurvy. **Case Description:** A 5-year-old boy with a background autism spectrum disorder (ASD) and food aversion, presented with progressive bilateral knee and hip pain for two months which led to refusal to walk. On presentation, he was hypertensive and was noted to have lower limb edema. Urinalysis and renal profile were normal ruling out the diagnosis of glomerulonephritis. He complained of pain upon extending the knees and refused to bear weight. On closer inspection, there were corkscrew hair. Echocardiogram showed evidence of mild pulmonary hypertension. Nonetheless, the tibia, knee and femur X-rays were normal. As such, we suspected scurvy and started treatment empirically with high dose vitamin C, multivitamins and other supplements. His lower limb pain resolved within 4 days and he started to ambulate after 1 week. He had complete resolution of symptoms after 2 months of treatment and repeated echocardiogram showed resolved pulmonary hypertension. In retrospect, vitamin C level came back to be <5 $\mu\text{mol/L}$ (Normal 28-120) while vitamin D was deficient at 40.5 nmol/L . Investigation for young hypertension is ongoing and he is on therapies for his ASD. **Discussion:** Vitamin C deficiency especially in children with restricted dietary intake has been under-reported and it should be suspected in those who present with musculoskeletal symptoms. Scurvy-induced pulmonary hypertension, albeit rare, is easily reversible with appropriate treatment.