Neutropenia and anemia secondary to copper deficiency in a child receiving long term jejunal feeding

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Abstract

Jejunal feeding is increasingly utilized in the pediatric population to reduce gastroesophageal reflux or aspiration pneumonia. We describe a pediatric patient who developed persistent neutropenia and anemia secondary to copper deficiency after more than one year of exclusive jejunal feeding. Bone marrow aspiration and trephine biopsy showed vacuolated myeloid and erythroid precursors compatible with copper deficiency. Short term treatment with mineral mixture powder including copper reversed the hematological abnormalities. This report highlights the risk of micronutrient deficiency and the haematological manifestations as a result of acquired copper deficiency in pediatric patients receiving long term jejunal feeding.

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