

Modern Day Scurvy – A Nutritional Alarm Bell

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INTRODUCTION:

Scurvy, historically linked with maritime voyages and vitamin C deficiency, has reemerged in contemporary times due to poor dietary habits. We present a case of a 5-year-old boy referred to us with initial diagnosis of bilateral knee septic arthritis, ultimately diagnosed with scurvy, highlighting the significance of nutritional deficiencies in the modern era.

REPORT:

The patient, previously healthy, presented with chief complaints of bilateral lower limb swelling and inability to weight bear for past 1 month. Symptoms progressed to migratory joint pain involving the knees and hips over the past month, accompanied by fever for the last three days. Clinical examination revealed both knees in 60° flexion, with tenderness upon light touch & significant effusion.

Laboratory investigations indicated elevated white cell count ($11.6 \times 10^9/L$), CRP (233 nmol/L), and ESR (43 mm/h). Knee radiographs showed osteopenia with non-specific irregular distal femur and proximal tibia epiphysis, while ultrasound of the hips and knees confirmed effusion without definitive periosteal elevation. Further history revealed a selective diet, predominantly consisting of condensed milk, instant noodles, and carbohydrates, with a notable avoidance of vegetables, fruits, and meat.

Concerns regarding vitamin C deficiency emerged, bolstered by negative results from both autoimmune and tuberculosis screenings, with pending vitamin C level analysis. Magnetic resonance imaging (MRI) of the bilateral knees exhibited musculoskeletal manifestations of scurvy, solidifying the diagnosis.

Initiation of therapy with oral administration of Vitamin C (100mg TDS) elicited significant improvement by the third day. This improvement

was evidenced by enhanced joint mobility and notable reductions in both limb swelling and joint effusion.



Figure 1: Radiograph bilateral knee.

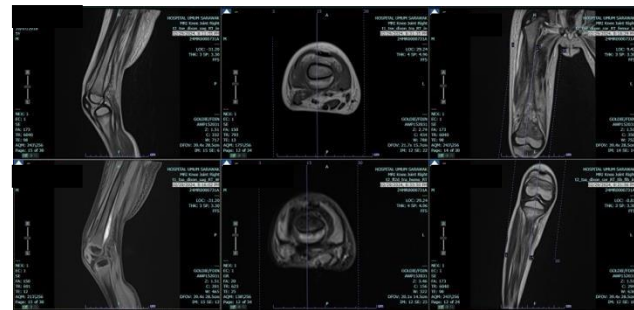


Figure 2: The MRI shows bilateral distal femoral subperiosteal hematoma with marrow and soft tissue edema.

CONCLUSION:

This case underscores the resurgence of scurvy in the modern era, emphasizing the importance of dietary diversity and adequate vitamin intake, particularly in pediatric populations. Early recognition and intervention can mitigate complications associated with nutritional deficiencies, preventing potentially severe sequelae.

REFERENCES:

1. Harknett, et al., (2013). Scurvy mimicking osteomyelitis. *Clinical Pediatrics*, 53(10), 995–999.