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Case Report

FORGOTTEN DISEASE “SCURVY - VITAMIN C DEFICIENCY”

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ABSTRACT

Introduction: -Scurvy is better known as severe vitamin C deficiency. Vitamin C, or ascorbic acid, is an essential dietary nutrient. It plays a role in the development and functioning of several bodily structures and processes, including: The proper formation of collagen, the protein that helps give the body's connective tissues structure and stability, cholesterol and protein metabolism, iron absorption, antioxidant action, wound healing, creation of neurotransmitters like dopamine and epinephrine.

Case Report:- An 18 months old male child was admitted in view of swelling of both knee joints with inability to move lower limbs. The patient also had global developmental delay and failure to thrive. On examination, both knee joints were swollen, tender with restricted movements. X-rays of bilateral knee joints revealed signs of scurvy. Blood reports also had low levels of vitamin C. Thus, the diagnosis of scurvy was made which was confirmed when patient was started with vitamin C supplements and gradually improved and later discharged

Conclusion:-Patients with scurvy may present with classic symptoms and signs or with nonspecific clinical symptoms and an absence of diagnostically suggestive physical findings. Concomitant deficiency states occur not uncommonly. Taking a thorough dietary history and measuring serum ascorbic acid levels should be considered for patients with classic signs and symptoms, nonspecific musculoskeletal complaints, or other vitamin or mineral deficiencies.

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INTRODUCTION

Scurvy is a disease related to lack of vitamin C, or ascorbic acid. The deficiency leads to symptoms of weakness, anaemia, gum related diseases, and skin problems. This is because vitamin C is needed for making collagen, an important component in connective tissues. Connective tissues are essential for structure and support in the body, including the structure of blood vessels. A lack of vitamin C will also affect the immune system, absorption of iron, metabolism of cholesterol and other functions. In Paediatric population, inadequate diet and improper weaning can be one of the major causes of scurvy. Though, modern cases of scurvy are rare but it can still affect populations which do not consume enough vitamin C and can be life threatening.

CASE REPORT

An 18 months old Male child with global developmental delay and failure to thrive presented to authors with swelling of both knee joints and inability to move the lower limbs. The child was irritable and had history of delayed weaning with reduced appetite. The patient also had a history of gum bleeding and fever on and off.

On examination, the patient was pale, with both the knees joints swollen and tender with restricted movements.

MATERIALS AND METHODS

Provisional diagnosis of arthritis for evaluation was done. X – ray of knee joint revealed –

- Weinberger sign
- Frankel's line
- Ground glass appearance of the bones
- Pencil thin Cortices
- Trummerfeld Zone

Scurvy was suspected on classical radiological picture. Blood investigations revealed anaemia and even Vitamin C Levels were low – 1.16 mg/l (2 – 14 mg/l). Child was treated with Vitamin C, gradually improved and discharged.

DISCUSSION

Scurvy results from lack of intake of vitamin C rich foods such as fresh fruits and vegetables. Affected infants present with irritability, failure to thrive, swollen and painful extremities

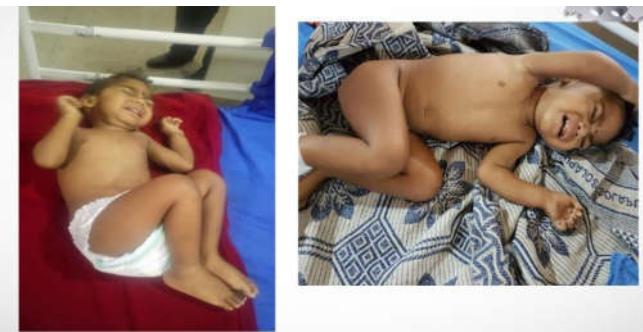
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with restriction of movements (pseudo paralysis), frog posture, gum bleeding, and scorbutic rosary. Characteristic radiological findings and rapid response to treatment with vitamin C confirms the diagnosis. Differential diagnoses include traumatic injury, septic arthritis/osteomyelitis, haemophilichemarthrosis, congenital syphilis, leukemic infiltration and other painful conditions. Costochondral beading may suggest the diagnosis of rickets but rachitic rosary is round and non tender, while rosary in scurvy is sharp and tender. All these conditions can generally be distinguished by the presence of associated clinical features such as fever, rash, or trauma. Scurvy is forgotten disease as it is rarely seen now a days. In children with global developmental delay where oral intake of nutrient are low as they have to depend on caretaker, might be seen in these children.

RESULT

In conclusion, this case illustrates That Just supplementation of Vitamin C can show marked improvement within 3 months. Although rare, scurvy remains a condition that is still encountered in the paediatrics population, especially among certain groups with unusual eating habits. A heightened awareness is needed to avoid unnecessary tests and procedures and to be able to implement treatment for a potentially fatal but easily curable disease.



References

1. Levine M. New concepts in the biology and biochemistry of ascorbic acid. *N Engl J Med.* 1986;314:842-902
2. Major RH. *A History of Medicine.* Springfield, IL: Charles C Thomas; 1954:51
3. Lind JA. *A Treatise on the Scurvy.* Stewart CP, Cuthrie D, eds. Edinburgh, Scotland: Edinburgh University Press; 1753
4. Lee RV. Scurvy: a contemporary historical perspective. *Conn Med.* 1983; 47:629 – 632,703-704
5. Tamura Y, Welch D, Zic JA, Cooper WO, Stein SM, Hummell DS. Scurvy presenting as painful gait with bruising in a young boy. *Arch PediatrAdolesc Med.* 2000;154:732-735
6. Shetty AK, Steele RW, Silas W, Denne R. A boy with a limp. *Lancet.* 1998;351:182
7. Gone I, Wadu M, Goodman ML. Capillary hemorrhage in ascorbic-acid- deficient guinea pigs: ultrastructural basis. *Arch Pathol.* 1968;85:493-
8. Hodges RE, Baker EM, Hood J, Sauberlich HE, March SC. Experimental scurvy in man. *Am J ClinNutr.* 1969;22:535-548
9. Hodges RE. Ascorbic acid. In: Goodhart RS, Shils ME, eds. *Modern Nutrition in Health and Disease.* 6th ed. Philadelphia, PA: Lea &Febiger; 1980:259 -273
10. Case Records of the Massachusetts General Hospital (Case 33-1986).
11. *N Engl J Med.* 1986;315:503-508
Levine M, Rumsey S, Wang Y, et al. Vitamin C. In: Ziegler EE, Filler LJ, eds. *Present Knowledge in Nutrition.* Washington, DC: ILSI Press; 1996: 146 -159

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