Scurvy Bone In A Child: An Orange A Day Would Had Kept The Doctor Away

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INTRODUCTION:
Scurvy is a disease that occurs when you have a severe lack of vitamin C (ascorbic acid) in your diet. Scurvy causes general weakness, anemia, gum disease, and skin hemorrhages. Scurvy is relatively rare in Malaysia and also first world countries where nutrition is not so much of a national concern, probably more concerning is diabetes. Malaysia is the number one most obese country in south east asia, followed by Thailand and Singapore. So by expectation we would expect less of these cases in these countries. Children with abnormal dietary habits, mental illness or physical disabilities are prone to develop this disease.

CASE:
This is a case of a 3+ year old boy from Bangkok Thailand, and had presented to the hospital for gradual or subacute onset of limping and inability to walk. These case was seen during an attachment in Lerdsin Hospital Bangkok. This an apparently lean but normally built patient complaining of 2 weeks weakness of the bilateral lower limb, we sudden 2 days history of total lost of ability to walk, he was then carried most of the time by the grandparents. No history or fall, trauma or accidents over that period of time. He was not on any citrus diet surprisingly and are also harped up on junk food. He plays well normally in the village with the neighbor kids with no active complains prior to this.

RESULTS:
It was also brought to attention that he easily bleeds in the gums, especially during brushing teeth and snacking. Even during his presentation to the clinic – he had some gum swelling with ecchymosis and petechial bleeds over the gums. Skin otherwise looks little dry, probably mild dehydration, no petechial rashes and no wounds. Limping with not much swellings over the knee, no tenderness, power as per presentation was 0-1/5, unable to stand or bare weight. Patient complains a vague no specific pain over the bilateral knee regions.

DISCUSSIONS:
Humans are unable to synthesize L-ascorbic acid because the enzyme L-gluconolactone oxidase is non-functional. Vitamin C deficiency leads to decrease in chondroitin sulfate and collagen synthesis and repair causing impaired intracellular hydroxylation of collagen peptides. Hence the net effect is altered bone formation with the greatest effect occurring in the metaphysis. This causes defect in spongiosa of the metaphysis at the growth plate, because the demand for type I collagen is greatest during new bone formation. Pseudo paralysis in this case, could be a result of bone pain.

CONCLUSION:
Early recognition of scurvy is difficult because the initial symptoms are often vague and nonspecific and can mimic variety of more common conditions. It is important to continue acknowledging the role of nutrition in health in order to promote healthy lifestyles and help prevent serious life threatening illnesses.

REFERENCES: