

Abstract

Prevalence and Characteristics of Scurvy in Thai Children and Its Outcomes at Siriraj

Hospital, Mahidol University, During 2000-2017

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Background and aims: A reemergence of scurvy is reported worldwide including unusual manifestations.

Objectives: We aimed to study the prevalence and clinical manifestations of scurvy in Thai children.

Methods: This retrospective study was conducted at Faculty of Medicine Siriraj Hospital, Mahidol University. The medical and radiographic records of children, aged 1-13 years old and diagnosed with scurvy during 2000 to 2017, were analyzed.

Results: Forty subjects were enrolled, with a median age of 3.6 years and showing a prevalence of scurvy of 0.52 cases per 10,000 patients. Regarding nutritional status, normal status, wasting, and overweight and obesity were found 55%, 25%, and 20%, respectively. The most chief complaint was inability to walk. During 2009-2017, one subject presented with convulsion and epidural hemorrhage that were unusual severe manifestations. Abnormal eating habits consisted of denying consumption of fruits and vegetables but drinking large amount of UHT cow's milk and soy drink. The common radiographic abnormalities included Wimberger ring sign and White line of Frankel. Twenty-five out of 26 subjects had abnormal radiographic studies ($P=0.015$). Sixteen out of 26 subjects whose serum ascorbic acid analyses were available, had abnormally low levels. After treatment, gum and skin bleeding, and inability to walk were resolved within 7-8 days, and 20 days, respectively; and consumption of fruits and vegetable was improved ($P=0.000$).

Conclusions: This study showed a prevalence of scurvy of 0.52 cases per 10,000 patients. Most of subjects had normal nutritional status and inappropriate eating habits. Favorable outcomes were found after treatment and dietary counseling.