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Scurvy Seen in Japan

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Introduction

Here, we describe a case of scurvy seen in Japan. An unmarried man in his 50s who had an unbalanced diet (including brown rice) and a drinking habit visited our hospital with a chief complaint of bilateral leg pain. Physical examination revealed the pain to be caused by purpura and intraarticular bleeding of the knee. There were no abnormalities in his blood platelet count or coagulation function. His blood vitamin C level had significantly decreased to ≤0.2 mg/L. Intravenous infusion of vitamin C resulted in improvement of his symptom.

Scurvy is a clinical syndrome associated with vitamin C (ascorbic acid) deficiency largely due to impaired collagen synthesis along with disordered connective tissue. Many types of collagen are present; collagen is composed of three peptide chains that form a regular, triple helical structure [1]. In cases with scurvy, collagen triple-helix is absent, thereby causing vascular wall fragility. Thus, bleeding can easily occur due to vascular endothelial damage.

Scurvy seen in developed countries is caused by a poor consumption of fresh vegetables and fruits for a long time. Fein et al. reported that 16.9% of hospitalized patients had vitamin C deficiency (≤2 mg/L) [2]. Blood levels of vitamin C decrease with aging. Scurvy can develop in chronic alcoholics, heavy smokers, and elderly people living alone who lack fresh vegetables and fruits [3]. It should be kept in mind that scurvy, though rare, can occur even in developed countries.

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