

Anemia, exertional dyspnea, and petechial rash in a healthy 62-year-old

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A 62-year-old man who smoked up to half-a-pack of cigarettes a day presented with fatigue, lightheadedness, exertional dyspnea, lower extremity swelling, ecchymoses, and petechiae. There was no history of trauma, infection, new medications, or abnormal diet. Physical exam revealed red petechial 3-5mm macules and pink-violaceous purpuric indurated patches over the bilateral upper and lower extremities, buttocks, and lower abdomen. Laboratory studies were significant for anemia (hemoglobin 7.9 g/dL) and elevated acute phase reactants. Thiamine, folate, and vitamin B12 were within normal limits. Workup was negative for thrombocytopenia, platelet dysfunction, coagulopathies, hemolysis, vasculitides, liver or gastrointestinal disease, rheumatologic disorders, and bone marrow disorders. Skin biopsy and histology revealed dermal extravasated erythrocytes without evidence of vasculitis or thrombi. On hospital day six, ascorbic acid plasma concentration was tested and found to be below the limit of detection. A diagnosis of scurvy was made and the patient was discharged on 1000mg Vitamin C daily. At six-week follow up, constitutional symptoms, anemia, extremity swelling, and rash were resolved.

The medical, hematology, and dermatology teams did not originally suspect a vitamin C deficiency in this patient. The patient kept a relatively normal diet, comprised of eggs and toast for breakfast, salads for lunch, and pasta with vegetables for dinner. He was previously an alcoholic but had not drunk alcohol for 15 years. He did not have

any disorders of the gastrointestinal tract; his only risk factor for scurvy was his tobacco use. On physical exam, in the setting of being edentulous, he did not have classic gingival findings. He also lacked typical histology findings such as follicular hyperkeratosis and perifollicular hemorrhage. In the case of our patient, it is suspected that his history of alcohol use and possible subclinical alcoholic cirrhosis may have contributed to malabsorption of ascorbic acid. Additionally, his smoking history likely contributed, as smoking is associated with depleted serum levels of ascorbic acid.

This case emphasizes the importance of the consideration of scurvy on the differential of petechiae, even in patients who do not present with the typical risk factors or features. Hospitalists and dermatologists alike should consider scurvy, particularly in patients at risk for malnutrition due to chronic conditions and those with a history of alcohol or tobacco use disorder.