Scurvy in psychiatric patients: An easy-to-miss diagnosis

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Two years ago, I cared for Ms. L, a woman in her late 40s who had a history of generalized anxiety disorder and major depressive disorder. Unable to work and highly distressed throughout the day, Ms. L was admitted to our psychiatric unit due to her functional decompensation and symptom severity.

Ms. L was extremely focused on physical symptoms. She had rigid rules regarding which beauty products she could and could not use (she insisted most soaps gave her a rash, though she did not have any clear documentation of this) as well as the types of food she could and could not eat due to fear of an allergic reaction (skin testing was negative for the foods she claimed were problematic, though this did not change her selective eating habits). By the time she was admitted to our unit, in addition to outpatient mental health, she was being treated by internal medicine, allergy and immunology, and dermatology, with largely equivocal objective findings.

During her psychiatric admission intake, Ms. L mentioned that due to her fear of anaphylaxis, she hadn’t eaten any fruits or vegetables for at least 2 years. As a result, I ordered testing of her vitamin C level.

Three days following admission, Ms. L requested to be discharged because she said she needed to care for her pet. She reported feeling less anxious, and because the treatment team felt she did not meet the criteria for an involuntary hold, she was discharged. A week later, the results of her vitamin C level came back, indicating a severe deficiency (<0.1 mg/dL; reference range: 0.3 to 2.7 mg/dL). I contacted her outpatient team, and vitamin C supplementation was started immediately.

Notes from Ms. L’s subsequent outpatient mental health visits indicated improvement in her somatic symptoms (less perseveration), although over the next year her scores on the Generalized Anxiety Disorder-7 and Patient Health Questionnaire-9 scales were largely unchanged (fluctuating within the range of 11 to 17 and 12 to 17, respectively). One year later, Ms. L stopped taking vitamin C supplements because she was afraid she was becoming allergic to them, though there was no objective evidence to support this belief. Her vitamin C levels were within the normal range at the time and have not been rechecked since then.

Ms. L’s obsession with “healthy eating” led to numerous red herrings for clinicians, as she was anxious about every food. Countertransference and feelings of frustration may have also led clinicians in multiple specialties to miss the diagnosis of scurvy. Vitamin C supplementation did not result in remission of Ms. L’s symptoms, which reflects the complexity and severity of her comorbid psychiatric illnesses. However, a decrease in her perseveration on somatic symptoms afforded increased opportunities...
to address her other psychiatric diagnoses. Ms. L eventually enrolled in an eating disorders program, which was beneficial to her.

**Keep scurvy in the differential Dx**

Symptoms of scurvy include malaise; lethargy; anemia; myalgia; bone pain; easy bruising; petechiae and perifollicular hemorrhages (due to capillary fragility); gum disease; mood changes; and depression.¹ In later stages, the presentation can progress to edema; jaundice; hemolysis and spontaneous bleeding; neuropathy; fever; convulsions; and death.¹ Although presently scurvy is rarely seen due to the availability of fortified foods, it is important to consider this disease in the differential diagnosis for patients who are anxious, somatic, or have an eating disorder. Treatment is easy and inexpensive. In addition, clinicians should be aware that individuals who are older, live in “food deserts,” and/or are homeless are also at risk.²,³

**References**