

Diana Punko, MD, MS; Mladen Nisavic, MD

Department of Psychiatry, Massachusetts General Hospital, Boston, MA

BACKGROUND

Consultation-liaison psychiatrists are ideally positioned to strengthen ties between primary care and community mental health providers. This has become an especially important role for our field during the severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) pandemic as individuals with serious mental illness are at increased risk for development of coronavirus disease 2019 (COVID-19) (Yao et al., 2020).

METHODS

Here we present a case report to illustrate complications of the shutdown due to pandemic and associated social isolation on medical and psychiatric health followed by brief literature review to highlight key opportunities for intervention.

CASE REPORT

A 42-year-old woman with major depressive disorder, heavy alcohol use, and Hashimoto's thyroiditis presented with failure to thrive in the context of medication non-adherence and disengagement from outpatient care. On evaluation, vital signs were significant for temperature of 32.6C and blood pressure of 72/58mmHg. She was somnolent, appeared disheveled, had poor dentition, and was psychomotorically slowed. She was oriented to self only, attention was impaired, and memory was poor.

Laboratory studies revealed gross metabolic disarray, pancytopenia, and **thyroid stimulating hormone of 161uIU/mL** (at outside hospital prior to transfer). Computed tomography of face showed fulminant odontogenic infection. Though she reported sad mood through the length of admission at no point did she endorse suicidal ideation. The patient subsequently tested positive on a COVID-19 screening test. It was felt that the COVID-19 infection was an incidental finding given absence of respiratory symptoms, although neuropsychiatric manifestation could not be excluded.

TSH	Latest Ref Range: 0.49 - 4.67 uIU/mL
113.00	▲
34.20	▲
14.00	▲
40.90	▲
39.80	▲
24.30	▲
8.64	▲
1.73	▲

Table 1. Trend in thyroid stimulating hormone from initial presentation through discharge.

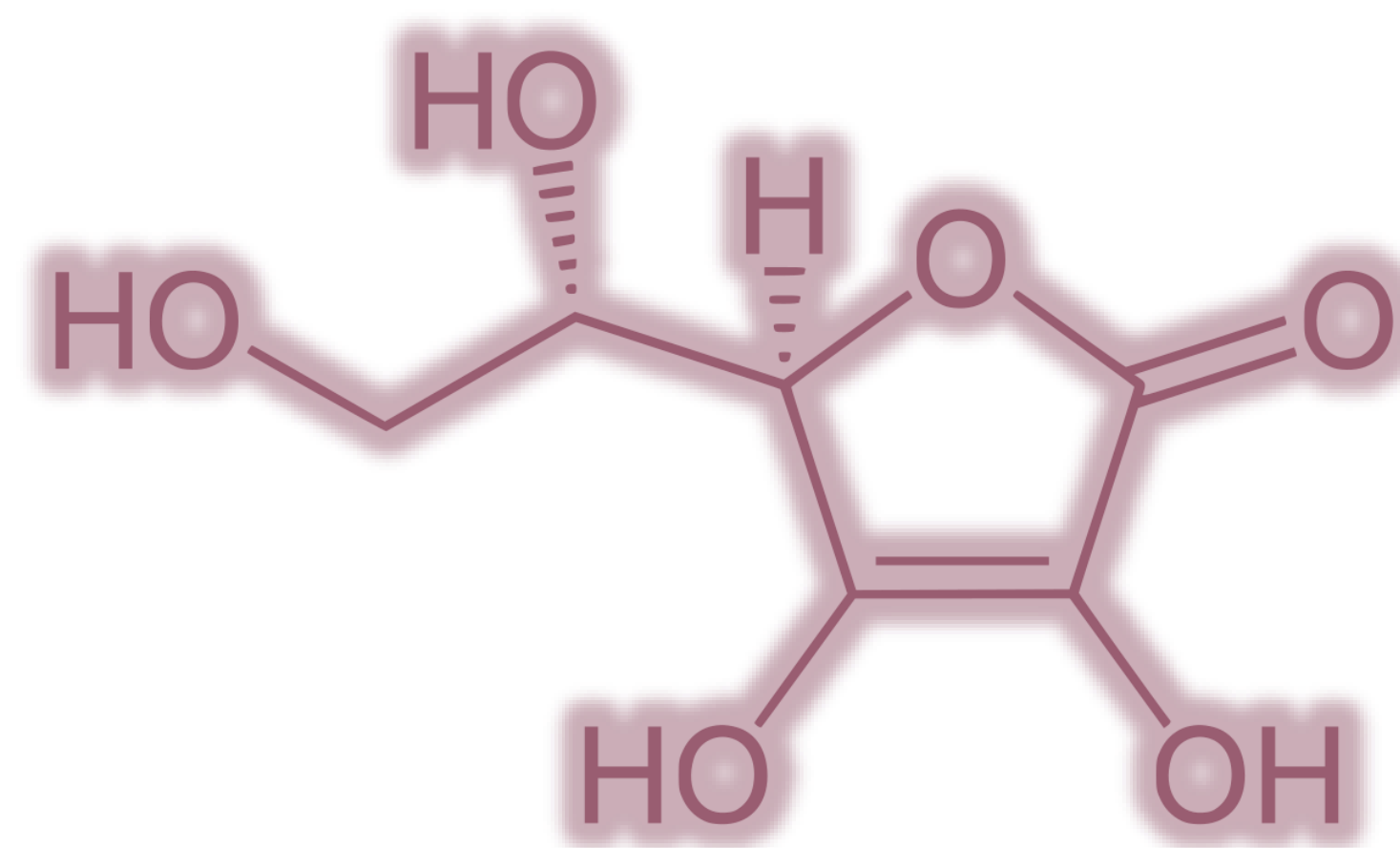


Figure 1. Molecular structure of vitamin C (ascorbic acid). Deficiency in this case led to scurvy with bleeding gums and dental caries.

Management:

- Intravenous levothyroxine was prescribed for working diagnosis of myxedema coma
- Odontogenic infection was managed with full mouth extractions and antibiotics
- Vitamin C supplementation was prescribed empirically and continued when micronutrient testing ultimately revealed a **serum ascorbic acid level of <0.1mg/dL**
- Home medication sertraline was re-started and uptitrated to 200mg during her medical course
- Inpatient psychiatric hospitalization was considered due to concern for grave inability to care for self, but once medically stabilized she was transferred to a rehabilitation facility to address global deconditioning with plan for continued psychiatric care upon discharge.

IMAGING FINDINGS



Figure 2. CT Neck soft tissue with contrast 2mm bone window demonstrating multiple subluxated teeth, dental caries. In other slices there is apparent demineralization of maxillary and mandibular alveolar processes.



Figure 3. CT Neck soft tissue with contrast 3mm SFT window revealing diffuse odontogenic infection with bilateral labial and buccal soft tissue thickening.

DISCUSSION

As early as July of last year reports began documenting exacerbations of existing psychiatric illness in the setting of the pandemic (e.g., Zhou et al., 2020; Pedrosa et al., 2020). A number of mechanisms have been proposed for this relationship including loss of social and structural supports, limited availability of in-person treatment, increase in co-morbid substance use, and direct effects of SARS-CoV-2 on the central nervous system. Mental health care was seemingly deprioritized in the setting of infection control measures, both at the individual and systems levels. A two-group, two-period cross-sectional study at this hospital found decreased psychiatric emergency department presentations following the initial COVID-19 outbreak as compared to the previous year and postulated that patients may have gone without treatment for weeks until access improved or symptoms became so burdensome that they could no longer be ignored (McDowell et al., 2021).

The present case is a particularly striking example of what can happen with postponement in care and is used to emphasize the reciprocal role of physical and mental health. The diagnosis of patient's withdrawal and apathy illustrates the complex interplay of medical and primary psychiatric factors, major depressive disorder exacerbated by severe hypothyroidism and associated encephalopathy. Furthermore, additional contributors - including nutritional and metabolic derangements (e.g., scurvy, beriberi related to chronic alcohol use, paraneoplastic process given her history of breast malignancy, odontogenic infection progressing to the central nervous system, and COVID-19 encephalopathy) - needed to be considered / excluded given profoundly impaired self care and nutritional status. Earlier detection of this patient's symptoms through collaboration between the primary care provider and outpatient psychiatrist may have prevented or at least attenuated the severe manifestations of her illnesses.

CONCLUSIONS

Individuals with mental illness and co-morbid medical conditions are especially vulnerable to the COVID-19 pandemic, both by direct pathophysiologic effects of infection and downstream consequences at the psychosocial and systems levels. Close coordination between the outpatient psychiatrist and primary care provider may have led to earlier detection of this patient's symptoms in this specific case and in general can help mitigate the long-term repercussions of the pandemic on individuals with psychiatric illness. Consultation-liaison psychiatrists are aptly poised to embrace their role as physicians first and focus on the basics of infection control, relapse prevention, and psychosocial support (Freudenreich, 2020). We can accept the challenge and develop thoughtful interventions to help mitigate the long-term repercussions of the pandemic on individuals with psychiatric illness like promoting accessibility to resources and supporting insurance coverage for telehealth services.

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