

IMAGES IN EMERGENCY MEDICINE

Nontrauma and Medical

“Please lower your mask”: A hard diagnosis in COVID-19 times**Nicolas Richard**^{1,3} | **Thomas Demangeat**² | **Sébastien Grigioni**^{2,3,4} |
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1 | PRESENTATION

A 64-year-old woman presented to the emergency department (ED) with a painful left ankle after an eversion ankle sprain. The patient wore a surgical mask according to hospital policy. She was a smoker and socially isolated and reported excessive alcohol consumption. First clinical examination found splinter hemorrhage and non-palpable purpura of petechiae of the lower limbs (Figure 1). Laboratory tests were notable for raised aspartate aminotransferase, alkaline phosphatase, gamma-glutamyltransferase, and mean corpuscular volume without anemia, but with folate deficiency. The physician removed her surgical mask during a second examination, revealing many loose teeth (Figure 2).

DIAGNOSIS**Scurvy**

A diagnosis of scurvy was suspected. Oral high-dose vitamin C supplements (ie, 1 g/day for 2 weeks) were given immediately, before diagnosis confirmation by vitamin C plasma levels ($< 3 \mu\text{mol/L}$; reference range, 26.1–84.6 $\mu\text{mol/L}$). Complete biological recovery was achieved after 1 more month of 500 mg/day of vitamin C supplements.

The prevalence of vitamin C deficiency is estimated at 7.1% in the United States¹ and is more frequent in patients with alcohol use

**FIGURE 1** Nonpalpable purpura of the lower limbs

disorders² or eating disorders.³ Untreated scurvy leads to death, which underlines the importance of early diagnosis in the ED. The low availability for immediate vitamin C measurements makes it difficult to use

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FIGURE 2 Patient loose teeth

in primary care, including the ED. Only complete examinations can help detect such a multifocal disorder. Patients must be asked to lower their surgical masks, in any context of presentation, not to neglect unex-

pected facial signs. This clinical case highlights one risk of misdiagnosis and delayed diagnosis during the COVID-19 pandemic for many patients with COVID-19 present in the ED.

ACKNOWLEDGMENTS

The authors are grateful to Nikki Sabourin-Gibbs, Rouen University Hospital, for her help in editing the manuscript.

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How to cite this article: Richard N, Demangeat T, Grigioni S, Achamrah N, Lvovschi V-E. “Please lower your mask”: A hard diagnosis in COVID-19 times. *JACEP Open*. 2022;3:e12692. <https://doi.org/10.1002/emp2.12692>