

Asymptomatic COVID-19 mimicking disseminated carcinoma in a patient with new-onset type 2 diabetes

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In December 2019, SARS-CoV-2, the new virus causing COVID-19, was firstly reported.¹ Due to the fact that only a quarter of asymptomatic patients present with no abnormalities on chest computed tomography (CT),² COVID-19 may pose additional diagnostic dilemmas.

We present a case of a 53-year-old man without comorbidities who was admitted to the diabetology ward in February 2021 due to new-onset diabetes accompanied by a fever of unknown origin. Laboratory test results showed hyperglycemia (459 mg/dl; glycated hemoglobin, 13.01%) and elevated levels of inflammatory parameters (C-reactive protein, 217.56 mg/l [reference range <5 mg/l]; procalcitonin, 11.47 ng/ml [reference range <0.5 ng/ml]). On physical examination, ulceration of the left foot was found (FIGURE 1A). The patient was treated with insulin and antibiotics which led to a satisfactory blood glucose control, fever resolution, and normalization of the inflammatory markers.

One month before the hospitalization, the patient had been diagnosed with asymptomatic SARS-CoV-2 infection confirmed by a reverse transcriptase–polymerase chain reaction test. Since then, he had been complaining of fatigue, polyuria, polydipsia, and weight loss (6 kg).

Abdominal ultrasound revealed several focal lesions in the right lobe of the liver (FIGURE 1B). Therefore, CT was performed, which showed nodules in both lungs (FIGURE 1C and 1E) and several focal lesions in the liver (FIGURE 1G). Based on these findings, disseminated cancer was suspected.

One of the lesions in the lungs was biopsied and there were no neoplastic cells found in the histological analysis. Neither gastrointestinal endoscopy nor a urological consultation revealed the primary tumor site. The patient was discharged home and advised to perform a control CT scan.

Three months later, CT of the abdomen and lungs revealed an almost complete regression of nodules in the lungs and liver (FIGURE 1D, 1F, and 1H).



FIGURE 1 A – ulceration of the plantar part of the patient's left foot; B – abdominal ultrasonography revealing focal lesions in the right lobe of the liver

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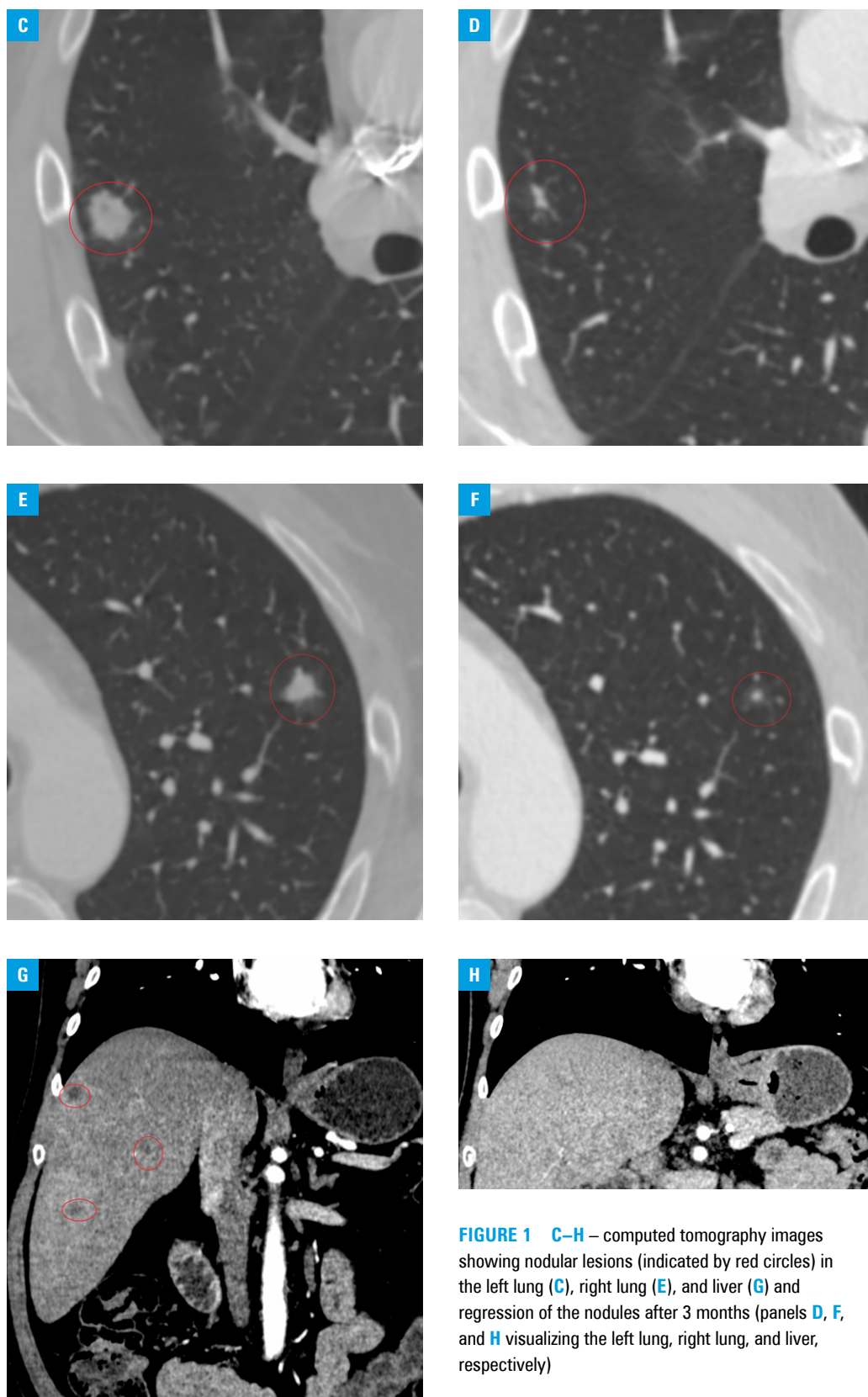


FIGURE 1 C–H – computed tomography images showing nodular lesions (indicated by red circles) in the left lung (**C**), right lung (**E**), and liver (**G**) and regression of the nodules after 3 months (panels **D**, **F**, and **H** visualizing the left lung, right lung, and liver, respectively)

Since its identification in China, COVID-19 has changed both the everyday life and medical reality. Before the pandemic, randomized controlled trials were at the top of the hierarchy of evidence-based medicine. Currently, however, case reports are strongly taken into consideration as doctors face the unknown disease and clinical images help them better understand its intricacy.

Case reports published to date have shown that SARS-CoV-2 can imitate pulmonary edema, hemorrhage, sarcoidosis, pulmonary infarction or interstitial lung diseases, and lung adenocarcinoma.³ Regarding cancerous lesions in the liver, we have found only a single report of COVID-19 imitating cholangiocarcinoma.⁴ To the best of our knowledge, there have been no

case reports of SARS-CoV-2 mimicking disseminated carcinoma with focal nodules in the lungs suggesting the presence of a primary tumor or metastases and focal lesions in the liver suggestive of metastases.

Moreover, there is mounting evidence for a bi-directional relationship between COVID-19 and diabetes, whereby patients with diabetes face a higher risk of severe COVID-19. At the same time, new-onset diabetes is being observed among patients infected with SARS-CoV-2; therefore, a diabetogenic effect of COVID-19 has been suspected.⁵

There is still much to find out about COVID-19, but it is worth remembering that the clinical picture of this disease might be misleading.

ARTICLE INFORMATION

CONFLICT OF INTEREST None declared.

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