



Incidental finding of COVID-19 pulmonary infiltrates on SPECT/CT attenuation correction CT

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INTRODUCTION

Myocardial perfusion imaging frequently employs attenuation–correction computed tomography (CTAC) to reduce attenuation artifacts. These scans may also incidentally detect non-cardiac findings. The prevalence of these non-cardiac findings varies, and methods of reporting and clinical significance are not definitively established.

CASE SUMMARY

We report a 65-year-old man with hypertension, obesity and intermittent cocaine use who presented with two weeks of dyspnea and exertional chest tightness who was admitted for observation and inpatient stress testing. Given clinical suspicion for CAD, an exercise stress single-photon emission-computed tomography (SPECT) with low-energy (120 kV, 30 mA) CT attenuation correction study was performed. Stress ECG and myocardial perfusion imaging were normal and CT for attenuation correction (CTAC) showed no coronary calcifications. However, the CTAC demonstrated abnormal pulmonary patchy ground glass opacities (GGOs) in the bilateral lower lobes that have been described in

patients infected with novel COVID-19 infection (Figure 1).

As a result of the identified GGOs, COVID-19 testing was performed and was positive. The patient received a 5-day course of hydroxychloroquine (Plaque-nil) with subsequent improvement of exertional dyspnea. He was discharged home with return precautions, self-isolation counseling and telehealth follow-up.

DISCUSSION

The Recent literature suggests that incidental non-cardiac findings were common in a VA population and observed in up to 20% of studies^{1–3} although specific guidelines regarding reporting of these findings have not yet been definitively established.

This case reinforces that, particularly in the midst of the coronavirus pandemic, careful examination of non-cardiac findings even on low-energy CTACs can provide important, clinically useful information.

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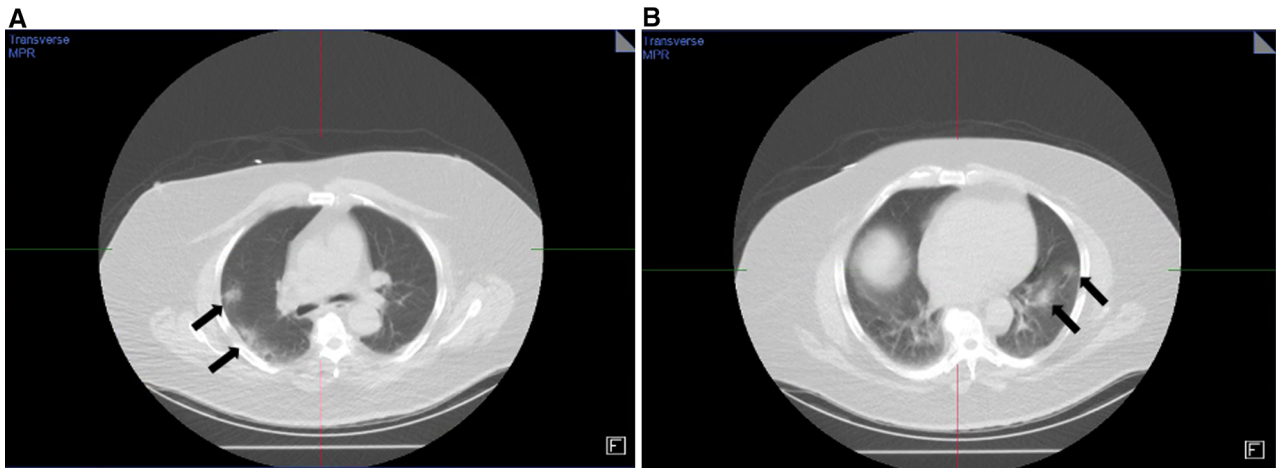


Figure 1. Transaxial CTAC images demonstrating bilateral ground glass opacities in the right (panel **A**) and left (panel **B**) lower lobes (black arrows), frequently identified with novel COVID-19 infection.

Disclosure

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