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Thromboembolic Complications in COVID-19 Pneumonia

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Figure. Axial reconstructions of contrast-enhanced CT with dual-energy technique demonstrate extensive pulmonary opacities in advanced COVID-19 pneumonia (a). Furthermore, pulmonary embolism (b, arrow) and bilateral deep vein thrombosis (c, arrowheads) are present. (d) The coronal iodine map derived from the dual-energy data set demonstrates multiple peripheral wedge-shaped perfusion defects.

Contrast-enhanced chest computed tomography (CT) with dual-energy technique in a 69-year-old patient with coronavirus disease 2019 (COVID-19) pneumonia demonstrated ground-glass opacities, crazy paving, and patchy consolidation (**Fig a**). Furthermore, filling defects were seen in segmental arteries of both lower lobes in keeping with pulmonary embolism (**Fig b**, arrow). Bilateral deep vein thrombosis was present (**Fig c**, arrowheads). The iodine map illustrated multiple

peripheral wedge-shaped perfusion defects not only in the lower but also in the upper lobes, suggesting more pronounced embolism than suspected from visible intraluminal filling defects (Fig d). This case illustrates the increasing evidence of high risk of thrombotic and embolic events, particularly in advanced stages of COVID-19 pneumonia. On nonenhanced CT scans, thrombotic/embolic complications may remain undetected.

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