Radiographic findings mirror clinical severity in H7N9 flu

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In patients with novel avian-origin influenza A H7N9 virus infection, radiological findings mirror the severity of the clinical presentation, according to a study published in the September issue of Radiology.

Qingle Wang, M.D., from Shanghai Medical College of Fudan University, and colleagues evaluated 12 patients (nine men and three women) with novel avian-origin influenza A H7N9 virus infection using chest radiography and thin-section computed tomography (CT). Two chest radiologists examined the images together with clinical data and investigated lesion patterns, distributions, and changes at follow-up.
The researchers found that all patients had progressing infection of the lower respiratory tract at presentation, with fever, cough, and shortness of breath that progressed to acute respiratory distress syndrome. On imaging, findings included ground-glass opacities (GGOs; 12 patients); consolidations, air bronchograms, and interlobular septal thickening (11 patients each); centrilobular nodules and reticulations (seven patients each); cystic changes (four patients); and bronchial dilatation and subpleural linear opacities (three patients each). In all cases, the lung lesions involved at least three lobes, and in 11 patients these were detected in the right lower lobe. At follow-up CT performed in 10 patients, interval improvement of the lesions was seen in three patients, while seven patients had worsening. The overall clinical severity of the disease was closely reflected in imaging findings.

"Rapidly progressive GGOs and consolidations with air bronchograms and interlobular septal thickening, with right lower lobe predominance, are the main imaging findings in H7N9 pneumonia," the authors write.

More information: Abstract
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