Pulmonary infection with *Pneumocystis jiroveci* (*P. carinii*) in an HIV-positive patient

Comments

*Pneumocystis jiroveci pneumonia* (previously known as *P. carinii pneumonia*) is rare in immunocompetent patients. However, it is a frequent cause of morbidity and mortality in immunocompromised patients, especially in those infected with HIV. It occurs more commonly in patients with CD4 counts below 200 cells per mm$^3$. Common symptoms include progressive dyspnea, cough (usually non-productive), and low fever. Pneumothorax is one of the most frequent complications.

The most common radiographic findings are bilateral perihilar interstitial changes that become homogeneous and diffuse with the progression of the disease. Other findings are single or multiple nodules, pneumatoceles, and pneumothorax. Pleural
Diagnosis of the case presented in the previous edition

Effusion and lymph node enlargement are uncommon. The imaging method of choice is computed tomography (CT), preferably high-resolution CT (HRCT), which is more sensitive and more specific than is simple X-ray. The most common HRCT findings are ground-glass opacities, which are found predominantly in the upper lobes, sometimes accompanied by septal thickening, and progress to acinar consolidations over the course of the disease. Cysts are seen in some patients. Small pneumothoraces are more easily detected on CT scans than on X-rays.

In this patient, P. jiroveci pneumonia was the initial manifestation of acquired immunodeficiency syndrome. However, the patient did not know that he was HIV-positive, and the diagnostic hypothesis, which was subsequently confirmed, was formulated only after the CT scan had been performed.

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References

There were no readers correctly diagnosing the case presented in the March/April 2007 issue