Adult Primary Varicella Pneumonia: High-resolution Computed Tomography Findings

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Picture.

A 73-year-old woman was hospitalized for the treatment of anaplastic large-cell lymphoma. She complained of itchiness with a rash on her trunk and was diagnosed with chickenpox. Although she had no respiratory symptoms, chest high-resolution computed tomography (HRCT) performed on the same day showed multiple nodules with surrounding ground-glass attenuation (GGA) and consolidation (Picture). Bronchoscopy was performed to diagnose the lung involvement. The histopathological features of the specimens ob-

tained via a transbronchial lung biopsy were nonspecific. An examination of the bronchoalveolar lavage (BAL) fluid demonstrated a total cell count of 229/ μ L, with the differential count showing 52% lymphocytes, 2% neutrophils, 1% eosinophils and 45% alveolar macrophages, while the ratio of CD4/8 was 1.75. Varicella-zoster viral DNA was detected in the BAL fluid (90×10^6 copy/mL), although no findings caused by other lung diseases were found. Therefore, the patient was diagnosed with primary varicella pneumonia.

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The HRCT findings disappeared following the administration of intravenous acyclovir treatment.

The HRCT findings of varicella pneumonia have been previously reported (1, 2), including small, well-defined and ill-defined nodules, centrilobular nodules, nodules with surrounding GGA, patchy GGA and coalescence of nodules. All of these HRCT findings were observed in the present case; therefore, the patient is an example of a typical patient with varicella pneumonia.

The authors state that they have no Conflict of Interest (COI).

References

1. Kim JS, Ryu CW, Lee SI, Sung DW, Park CK. High-resolution CT findings of varicella-zoster pneumonia. *AJR Am J Roentgenol* **172**: 113-116, 1999.
2. Maher TM, Gupta NK, Burke MM, Carby MR. CT findings of varicella pneumonia after lung transplantation. *AJR Am J Roentgenol* **188**: W557-W559, 2007.