



## Bronchiolocentric pulmonary involvement due to chronic lymphocytic leukemia

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Two cases of pulmonary chronic lymphocytic leukemia (CLL) with high-resolution computed tomography (HRCT) changes characterized by a bronchiolocentric distribution are reported. Both patients were admitted to hospital because of wheezing and dyspnea in spite of having non-specific chest X-ray films. HRCT showed findings suggesting bronchiolitis, such as mosaic perfusion, expiratory air-trapping and centrilobular nodules (Figure 1). Bronchoalveolar lavage (BAL) revealed a majority of small leukemic B-lymphocytes expressing monoclonal light chains (Figure 2). Once the diagnosis had been made, chemotherapy was started with clinical and radiologic improvement.

This pattern of lung infiltration was previously reported and documented only histologically by Palosaari,<sup>1</sup> whereas it has not been documented to date with HRCT scan in CLL patients. The data reported demonstrate that chest HRCT scan is useful in the detection of bronchiolocentric involvement of CLL and should encourage clinicians to consider BAL as an effective diagnostic procedure in this setting.<sup>2,3</sup>

### References

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3. Rai KR. Chronic lymphocytic leukemia. Current strategy and new perspectives of treatment. *Haematologica* 1999; 84(EHA-4 Educational Book):94-5.

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Figure 1. HRCT scan slice at the level of the tracheal carina. Centrilobular nodules and "tree in bud" pattern in the upper right lobe.

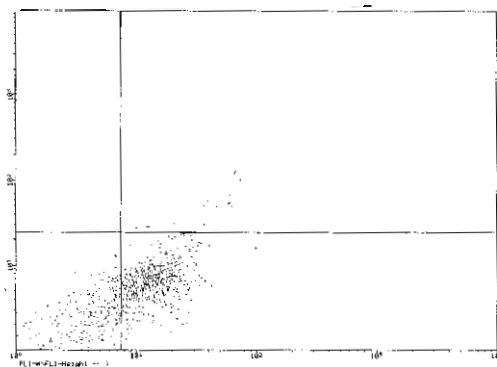


Figure 2. BAL specimen: cytofluorimetric analysis. A monoclonal expression of surface k-light chains is evident.