Case Report

Computed Tomography of Bronchiolitis Obliterans

Yukio Miki, Hiroto Hatabu, Masashi Takahashi, Norihiro Sadatoh, and Yasumasa Kuroda

Abstract: A case of bronchiolitis obliterans was studied by high resolution CT. The morphologic changes of the lesions are described. Index Terms: Bronchiolitis obliterans—Bronchi, diseases—Computed tomography.

Bronchiolitis obliterans was first described by Lange in 1901. We describe the radiologic findings in a case of bronchiolitis obliterans as demonstrated by high resolution CT (HRCT).

CASE REPORT

A 56-year-old man was admitted because of fever, dyspnea, and hemoptysis. Routine laboratory tests revealed leukocytosis (white blood cell count 15,800), C-reactive protein 25.8 mg/dl, and erythrocyte sedimentation rate 76 mm/h.

Chest radiography demonstrated bilateral alveolar opacities with air bronchograms (Fig. 1). High resolution CT revealed bilateral segmental alveolar opacities with air bronchograms (Fig. 2a).

Pulsed steroid therapy with prednisolone 1,000 mg/day for 3 days was administered. Fever, dyspnea, and hemoptysis subsided. High resolution CT showed diminishment of the pulmonary infiltrates (Fig. 2b).

Three weeks after admission, fever recurred and cervical lymphadenopathy appeared. Lymph node biopsy revealed malignant lymphoma (diffuse, mixed or pleomorphic type, T-cell). Fever and lymphadenopathy disappeared following administration of prednisolone 30 mg/day for 19 days.

However, fever, dyspnea, and hemoptysis recurred soon after withdrawal from steroid therapy (Fig. 2c). An open lung biopsy revealed granulation tissue plugs within the lumen of the bronchiole and organizing pneumonia around it, compatible with bronchiolitis obliterans (Fig. 3).

Three weeks after readministration of prednisolone 30 mg/day, HRCT showed marked improvement (Fig. 2d). Chemotherapy for malignant lymphoma was initiated and the patient was discharged.

DISCUSSION

Bronchiolitis obliterans is a descriptive term for a fibrosing inflammatory process that occludes the lu-

From the Department of Radiology, Tenri Hospital, 200 Mishima-cho, Tenri City, 632, Japan. Address correspondence and reprint requests to Dr. Y. Miki.

FIG. 1. Chest radiograph obtained on the day before open lung biopsy. Note bilateral multiple patchy areas of consolidation predominantly distributed at left lower lung.
REFERENCES

open lung biopsy on the information can change the site of the lesion. We desired the site of an demonstration of the distribution and morphological changes in high-resolution CT provided with a precise cytology.

non-disseminated progression in the lung parenchyma. The pathology shows the pathology area of consolida-

We report the detailed radiographic presentation of a case with bronchiolitis obliterans by HRCT.

Bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

combination of airflow obstruction occurs in one-third.

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis. Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-

bronchiolar obliterans, interstitial fibrosis, and air trapping indicative of chronic interstitial fibrosis.Thirty-nine cases with chronic interstitial fibrosis have been reported. In this study, the radiographic findings in 24 cases were analyzed with radiologic pneumonias.

Endobronchial, bronchiolar obliterans can be clas-


