

Bronchiolitis obliterans organizing pneumonia (BOOP) is a rare inflammatory lung disorder which was first described in the 1980's as a unique disease entity composed of clinical symptoms such as flu-like illness in many individuals as well as cough and shortness of breath with exertional activities. Wheezing and hemoptysis are rare. The term bronchiolitis obliterans refers to swirls or plugs of fibrous, granulation tissue filling the small bronchiole airways. Organizing pneumonia refers to organized swirls of inflammatory tissue filling the small spherical units of the lungs referred to as alveoli and the alveolar ducts. Individuals with BOOP experience inflammation of the bronchioles and alveolar lung spherical units simultaneously, which distinguishes it from other similar inflammatory lung disorders. Though the term pneumonia is used, BOOP is not an infection. In most cases, the cause of BOOP is unknown and is referred to as idiopathic BOOP. Causes of BOOP include radiation therapy; exposure to certain fumes or chemicals, exposure to birds, post respiratory infections, after organ transplantation; and from more than 35 medications. Systemic disorders associated with BOOP include the connective-tissue diseases, immunological disorders, and inflammatory bowel disease. BOOP has also been seen in association with lung abscess, lung cancer, and lymphoma. Importantly, the BOOP lesion is seen in individuals with idiopathic pulmonary fibrosis, or IPF, and in these situations, the primary lung disease is the IPF and the secondary process is BOOP. BOOP affects males and females in equal numbers. It develops in individuals between 40-60 years old, but the disorder may affect individuals of any age. BOOP is estimated to account for 5 to 10% of the chronic infiltrative lung disease in the United States. BOOP has been reported throughout the world. A diagnosis of BOOP may be made based upon a clinical evaluation, a detailed patient history, identification of characteristic findings, and specialized tests such as x-ray studies, especially a high-resolution chest computed tomography or HRCT, pulmonary function studies that includes a diffusing capacity test, and often a lung biopsy for microscopic tissue analysis. Lung biopsy may be via conventional transbronchial biopsy which frequently captures the diagnosis, transbronchial cryobiopsy which is newer and recovers a larger bit of tissue or in selected cases, open lung biopsy. The HRCT scan shows "ground glass" densities that are often triangular in shape with the base of the triangle along the chest wall and the airways can often be seen in the ground-glass opacities.