

HYPERSENSITIVITY PNEUMONITIS: FROM CLINIC TO DIAGNOSIS

Julia Bonamigo

Undergraduate Course in Medicine,
Department of Life and Health Sciences,
Joaçaba, SC

Carlos Alberto Massucato

Professor of the Medicine Course,
Department of Life and Health Sciences,
Joaçaba SC

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: Introduction: Respiratory diseases have a great impact and global importance. This statement exists due to the cause and consequence relationship of respiratory system diseases with the environment. Hypersensitivity pneumonitis is an interstitial lung disease of the granulomatous type, which involves an exacerbated response to the inhalation of organic and inorganic antigens. Because it is a non-homogeneous syndrome with a non-specific clinical behavior, the disease in question is confused with other pulmonary pathologies and, therefore, underdiagnosed. Epidemiologically, in Brazil, 3 to 13% of interstitial lung diseases are PH. Prevalence varies considerably throughout the world, depending on host risk factors, diagnostic methods, type and intensity of exposure, geographic conditions, and agricultural and industrial practices. This scenario, when in a region with great agro-industrial power, generates personal, professional and economic impact. In Santa Catarina, exposure to fungi, with emphasis on domestic mold, and bird rearing are the most frequent causes. **Goal:** This summary intends to elucidate available diagnostic methods for health professionals that, together with the clinic, allow an early approach, sometimes resolving it, avoiding the progression to respiratory failure. **Method:** From the report of two cases, the clinical, radiological and histopathological evolution of the disease was observed in the acute phase (usually 4-12 hours after exposure), subacute and chronic (insidiously, for months to years), with the most varied types of environmental and occupational exposure. **Results:** The most common signs and symptoms are dyspnea, cough and inspiratory wheezes on lung auscultation. Other possible symptoms described are nonspecific and include fever, chills, fatigue, myalgia, chest tightness, headache, and weight loss. In

lung function tests, reduced forced vital capacity is the most commonly encountered physiological change. If the causative exposure is eliminated, the course may be benign and resolve completely. However, if chronic, it is possible to experience periods of exacerbation of symptoms with or without reexposure to the antigen. Acute/subacute radiological findings on chest computed tomography show infiltrative characteristics on inspiration (centrilobular nodules, ground-glass opacity, mosaic attenuation) and, on expiration, air trapping. When chronic, reticular opacities with bronchiectasis, intralobular septal thickening and honeycombing stand out. Bronchiolar obstruction presenting in *headcheese sign*, it is also highly specific. As for typical biopsy findings, the proposed criteria are valid for both lung biopsy and bronchoalveolar lavage by bronchoscopy: 1) a marked cellular interstitial pneumonia surrounding the small airways (“bronchiolocentric”) accompanied by 2) a chronic cellular bronchiolitis, 3) a distinct pattern of granulomatous inflammation and 4) no histopathologic features to suggest a more likely alternative. **Conclusion:** It is understood that early diagnosis depends on multidisciplinary and is necessary to prevent disease progression. The diagnostic methods must be correlated with the clinical history and, after identification, the prolonged exposure antigen must be removed, which can generate major changes in the family and professional structure.

Keywords: hypersensitivity pneumonitis; antigens; early diagnosis.