New Guidelines Clarify Diagnosis of Hypersensitivity Pneumonitis

Patient-centered, step-by-step approach seeks to reduce high rate of misdiagnosis

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DENVER — The American College of Chest Physicians has published new guidelines for the diagnosis and evaluation of hypersensitivity pneumonitis (HP), an interstitial lung disease characterized by scarring and/or inflammation of the interstitium — the area surrounding the lung’s air sacs, blood vessels and airways. National Jewish Health pulmonologist Evans Fernández, MD, spearheaded the effort and is lead author of the guidelines.

“A patient-centered and interdisciplinary diagnostic approach to a confident or working HP diagnosis is comprehensively addressed in these guidelines. We provide physicians with a clear, step-by-step approach that guides them through a sometimes challenging evaluation,” said Dr. Fernández.

Hypersensitivity pneumonitis starts as an inflammation of the lungs caused by inhaling a foreign substance that then causes an immune reaction. The inflammation can progress to scarring of the lungs and long-lasting disease. A common cause of HP, known as “bird fancier’s lung,” is caused by repeated or intense exposure to proteins found in the feathers or droppings of many species of birds. HP can also be caused by exposure to dust from moldy hay, straw and grain; aerosols containing fungi; bacteria in humidifiers, heating systems and air conditioners; and certain chemicals.

As a pulmonologist at National Jewish Health, the nation’s leading respiratory care hospital and a tertiary referral center for lung disease, Dr. Fernández sees numerous HP cases every year. He was struck by the overtesting and frequent misdiagnosis of HP — patients diagnosed with others diseases who had HP and patients diagnosed with HP who did not have it. So, under the sponsorship of the American College of Chest Physicians, he led an effort to develop guidelines to help physicians better diagnose the disease and convened an expert panel to complete that work. National Jewish Health physicians David Lynch, MD, and Kevin Brown, MD, were among the panel members.

Part of the challenge of diagnosing HP is that there is no single test that can definitively diagnose the disease. Thus, the diagnostic process requires careful integration and interpretation of the clinical, serological, imaging and histological information to help identify patients with a high or low probability of HP in whom further workup may or may not be needed.

To complete the project, Dr. Fernández and his colleagues sifted through hundreds of scientific papers and consulted with additional experts to develop 14 major recommendations and a step-by-step algorithm that guides physicians through a process that builds evidence for or against the disease.

“The diagnosis of suspected HP cases should be a step-wise process with the decision to order the next diagnostic test based on the results of the previous test, the clinical context, patient preference and overall treatment objectives,” said Dr. Fernández. “Physicians should start with the least invasive tests and progress to more invasive tests only if more evidence is needed, ideally in the setting of consensus multidisciplinary discussion.
“We hope physicians will use these guidelines to improve the diagnosis of hypersensitivity pneumonitis to get patients the proper care more quickly and effectively.”

**National Jewish Health** is the leading respiratory hospital in the nation. Founded 123 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the media resources page.

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