



*Lynn Markwell*

HYPERSENSITIVITY  
PNEUMONITIS

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In August 2003, I noticed I was short of breath and sometimes had a dry, hacking cough during my five-mile walks. By the next year, the symptoms worsened, and I'd have to bend over to cough and catch my breath while my heart raced. Afterwards, I would collapse into bed for a half hour then drag myself to work.

I was the head of a highly regarded classical music program at a school, which included music education as part of their core curriculum, and I stayed in my office more than usual. I couldn't climb the ninety stairs that I used to take at a full run. My stamina was greatly reduced and, while producing programs, I sweated a lot if they involved physical work. It was embarrassing.

My coughing fits became so uncomfortable for my walking partner that she refused to walk with me until I saw a doctor. I was diagnosed with exercise induced asthma, prescribed medication, and sent on my way. It didn't help, and I grew weaker over the summer. I couldn't get enough air into my lungs. I couldn't inhale. I couldn't yawn deeply. I was exhausted and spending a lot of time on the couch. I was panting in my sleep.

One parent at my school was also my endocrinologist at University of California, San Francisco. I was referred to the chest clinic and within minutes, I was diagnosed as having interstitial lung disease. My first DLCO upon arrival was 7.7. In January 2005, I had a VAT lung biopsy, which revealed the culprit: hypersensitivity pneumonitis.

Later that year, I was declared disabled. I was 52 years old, and it was a shock to leave my job—my six-days-a-week, 14-hour-days job—with no warning. I was at my peak earnings in a position that I loved, and suddenly it all stopped. My husband of

## HYPERSENSITIVITY PNEUMONITIS (HP)

This interstitial lung disease is caused by an immune response to an inhaled antigen of organic material from bacterial, fungal, plant, or animal proteins. Initial exposure results in sensitization in which the body forms antibodies to these antigens. Repeated exposure results in inflammation. If the exposure is not halted, it can permanently damage the lung.

- HP can be categorized as acute, subacute, and chronic.
- Some individuals may have a genetic predisposition.
- Treatment consists of removing the source of the exposure and eradicating any residual antigens to prevent re-exposure. Systemic steroids are often used if the individual is severely ill or removal of the trigger is insufficient.
- Those at high risk include farmers, bird hobbyists, sandblasters, miners, tunnelers, millers, and potters.

*Learn more: American Thoracic Society. Breathing in America: Diseases, Progress, and Hope. New York, NY. 2010. [thoracic.org/education/breathing-in-america](http://thoracic.org/education/breathing-in-america)*

40 years and I survived because we always lived below our means, had no debt, and money in the bank. We adjusted our lifestyle to a single income. I was thankful that our son was away at college and didn't have to deal with the illness on a day-to-day basis. This disease tears families apart, but we are committed to each other to the very end.

I entered into a pulmonary rehabilitation program later that year. My life completely changed. I was surrounded by other people with lung diseases—I was no longer isolated! I had social and emotional support all while developing muscles. I learned so much, including energy conservation, anxiety management, and pursed-lipped and diaphragmatic breathing.

For the past eight years, I have worked out five days a week in hospital rehabs and in my garden on Saturdays. I now practice power yoga every week, and I believe this long-term and consistent workout routine has delayed the need for lung transplants.

My DLCO has fluctuated, but I'm happy to report that after a six-week run of high dosages of prednisone, my unadjusted DLCO was 15.36. That's the life of living with an interstitial lung disease.

*Lynn Markwell was a patient speaker at the ATS 2012 International Conference in San Francisco.*