**Pulmonary Hemosiderosis**  
Joseph Junewick, MD FACR  
05/20/2013

**History**  
9 year old male with iron-deficiency anemia and hemoptysis.

**Diagnosis**  
Pulmonary Hemosiderosis

**Additional Clinical**  
Bronchoalveolar lavage with hemosiderin laden macrophages.

**Discussion**  
Idiopathic pulmonary hemosiderosis (IPH) is an uncommon disease of unknown origin characterized by recurrent or intermittent hemoptysis, pulmonary infiltrates due to alveolar hemorrhage, iron deficiency anemia, and the presence of hemosiderin-laden alveolar macrophages in the bronchoalveolar lavage fluid. The typical radiographic findings of IPH are areas of airspace consolidation or ground-glass opacities, frequently with a perihilar and lower lung zone predominance. CT findings include nodules and patchy areas of ground-glass attenuation in the subacute phase and diffuse homogeneous areas of ground-glass attenuation during an exacerbation. MR finding include relatively decreased lung parenchymal signal intensity on T2-weighted images due to the paramagnetic effect of ferric iron. The differential diagnosis of pulmonary hemosiderosis in childhood includes Goodpasture syndrome, Heiner syndrome and pulmonary hemosiderosis in association with cardiac or pancreatic involvement. Lung biopsy is confirmatory. IPH is occasionally associated with celiac disease, known as Lane-Hamilton syndrome. IPH occurs most commonly between ages 1 and 7 years and occurs with equal frequency in boys and girls. Although the disease is usually lethal, aggressive therapy can permit survival longer than 10 years.

**Findings**  
CT-Extensive peripheral and lower lower lobe ground glass opacification with tiny subpleural blebs.  
CR-Chest radiograph obtained 2 months after CT shows improved mixed alveolar and interstitial disease.

**Reference**  

**Contributor**  
Chirag Patel, MD
Disclaimer
This teaching site is partially funded by an educational grant from GE Healthcare and Advanced Radiology Services, PC. The material on this site is independently controlled by Advanced Radiology Services, PC, and GE Healthcare and Spectrum Health have no influence over the content of this site.

Content Download Agreement
The cases and images on this website are owned by Spectrum Health. Permission is granted (for nonprofit educational purposes) to download and print materials to distribute for the purpose of facilitating the education of health professionals. The authors retain all rights to the material and users are requested to acknowledge the source of the material.

Site Disclaimer
This site is developed to reach healthcare professionals and medical students. Nothing this site should be considered medical advice. Only your own doctor can help you make decisions about your medical care. If you have a specific medical question or are seeking medical care, please contact your physician.

The information in this website is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific medical condition. The viewpoints expressed in these cases are those of the authors. They do not represent an endorsement. In no event will Advanced Radiology Associates, PC, Spectrum Health Hospitals (Helen Devos Children’s Hospital) or GE Healthcare be liable for any decision made or action taken in reliance upon the information provided through this website.