Sarcoidosis and HIV

**Key Points:**
- There are several case reports of sarcoidosis occurring in HIV+ patients as a manifestation of immune reconstitution; in all of those patients, the CD4 count has been > 200.
- Sarcoidosis can be staged into one of 5 stages (0-4) using the CXR.
- 75-90% of patients with sarcoidosis have hilar adenopathy on CXR.
- 5-10% of patients with sarcoidosis have a normal CXR.

I. What is the story with sarcoidosis and HIV?

- Prior to the introduction of HAART, 14 case reports in the literature of co-occurrence of sarcoidosis and HIV. In all of these cases, sarcoidosis either preceded the diagnosis of HIV or sarcoidosis was diagnosed with CD4 > 200.
- Since the introduction of HAART, there are at least 5 case reports in the literature of sarcoidosis developing in HIV+ patients during immune reconstitution. In all 5 cases, CD4 count was > 200 by the time signs and symptoms of HAART developed.
- Interestingly, both sarcoidosis and HIV cause a reduction in circulating CD4 lymphocytes but by different mechanisms – in HIV, the cells are destroyed, whereas in sarcoidosis they accumulate in granulomas.

II. Remind me again of the radiographic staging of sarcoidosis …

A. Stage 0: normal CXR (5-10% of patients)
B. Stage I: CXR with bilateral hilar adenopathy only (50% of patients present this way)
C. Stage II: CXR with bilateral hilar adenopathy with interstitial infiltrates (upper > lower zones); present at diagnosis in 25% of patients
   - 75-90% of patients have hilar adenopathy, placing them in either Stage I or II
D. Stage III: interstitial disease, predominantly upper lobes, with “shrinking” or absent hilar adenopathy
E. Stage IV: advanced interstitial fibrosis