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Atypical pericardial opportunistic infection

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Written consent was obtained from patient and PSJF HRPP has determined that this case report, as submitted, does not meet the definition of research and does not require IRB review as defined in the federal regulations.

Case – patient presentation

- 36-year-old Hispanic male with no known medical history
- 1-month progressive pleuritic chest pain, dyspnea, dry cough, unintentional weight loss and night sweats
- No improvement with outpatient treatment of community acquired pneumonia
- Migrant chicken farm worker who traveled from Mexico two years ago
- Received monitored tuberculosis treatment in Mexico 7 years ago

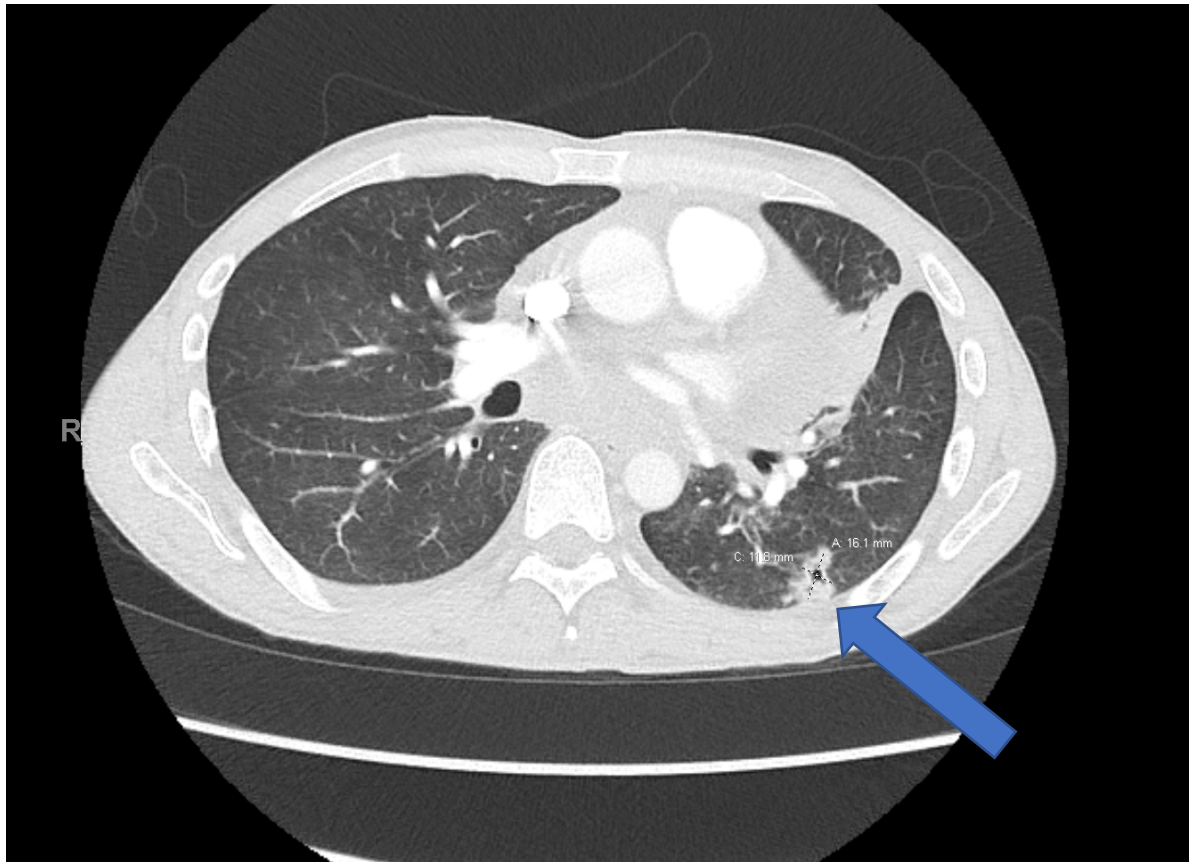
Case - physical exam

Vitals: BP 93/57, HR 82, RR 22, SpO2 98% on room air. BMI: 16.97
General: cachectic male with temporal wasting
HEENT: no LAD
CV: Distant heart sounds, RRR.
Abdomen: Soft, nontender, no masses or organomegaly.
Skin: No rash or jaundice. Scattered tattoos.
Neuro: Left foot clonus and hyperreflexia

Case - workup

- HIV-1 positive
- CD4 T-cell count: 12 cells/uL

- ECHO: Large 2.3 cm circumferential pericardial effusion without tamponade physiology, LVEF 40%.



Left lower cavitary nodule measuring 1.6x1.2cm

Considerations in AIDS

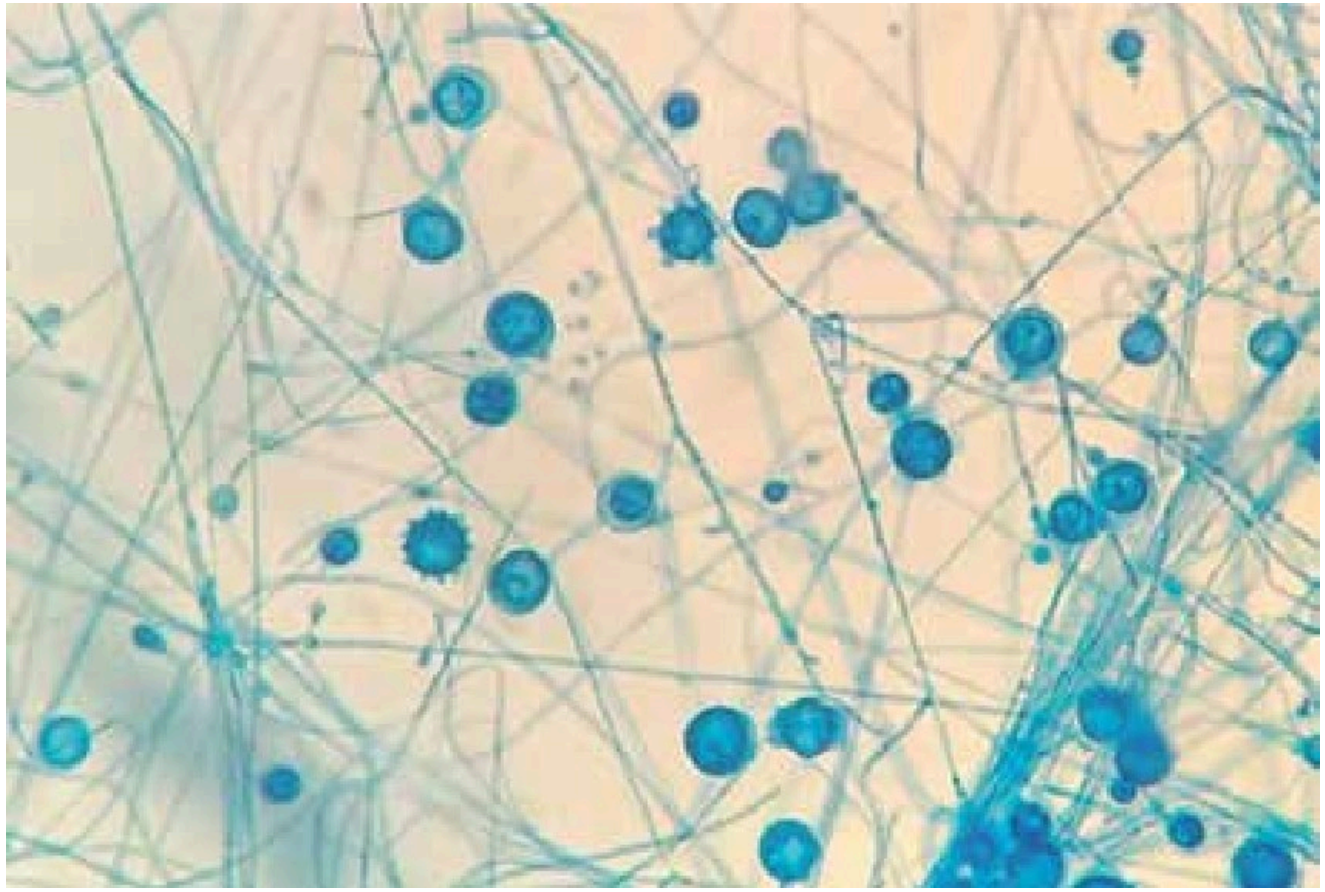
- High risk of immune reconstitution inflammatory syndrome (IRIS) with initiation of antiretroviral therapy
  - Tuberculosis
  - Cryptococcus
  - Mycobacterium avium complex

- PredART Trial (*NEJM 2018)*
  - Moderate dose of prednisone giver over four weeks to patients with HIV-TB co-infection reduce the risk of IRIS by 30%
  - Reduce severity and total dosage of steroids associated with IRIS treatment

Differential of AIDS related cavitary lesions

- Tuberculosis
- Nontuberculous mycobacterial infection
- Bacterial
  - Nocardia
- Lymphoma

- Fungal
  - Pneumocystis jiroveci
  - Invasive aspergillosis
  - Cryptococcus
  - Coccidiomycosis
  - Histoplasmosis



Case - diagnosis

- Pericardiocentesis
- Lumbar puncture with CSF analysis
- Navigational bronchoscopy
- Blood tests

- NEGATIVE for aspergillus, pneumocystis, cryptococcus, tuberculosis, toxoplasmosis, legionella, nocardia, mycobacterium, lymphoma

POSITIVE serum histoplasmosis antigen

Histoplasmosis

- Opportunistic infection with significant morbidity and mortality (>37% in the US) particularly those with CD4 lymphocyte counts less than 150 cells/uL.
- Fatal without treatment in HIV patients.
- North and Central America (Midwestern states, Ohio/Mississippi River)
- Pericardial effusion is a rare initial presentation for patients with AIDS related disseminated histoplasmosis.
- Fungal pericarditis is an infrequent form of pericarditis, constituting approximately 1% of all causes of pericarditis (1); histoplasma is the most common fungal pericarditis in the US due to high prevalence.

References

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