COCCIDIOIDOMYCOSIS QUICK SHEET*

ACUTE PULMONARY COCCIDIOIDOMYCOSIS

DIAGNOSIS

- **Symptoms:** Cough, chest pain, shortness of breath, possible fever, fatigue, headache, myalgia and arthralgia
  - Symptom onset within weeks after exposure in a cocci endemic area: Central California (PVSP, ASP, KVSP, NKSP, WSP, SATF, COR, CCI)
- **Chest x-ray findings are nonspecific:** Infiltrates, nodules, cavities, hilar adenopathy, or normal
- **Lab:** Eosinophilia, elevated ESR, IgM antibody serology confirms diagnosis but may be negative initially, IgG antibody (complement fixation) titers decline over time but may persist for years

Risk Factors for Severe and Disseminated Disease:

- Immunosuppression: e.g., HIV, lymphoma, chemotherapy, high dose prednisone, TNF antibody treatment
- Solid organ transplant recipients
- Diabetes mellitus
- Pregnancy
- African-American or Filipino

MANAGEMENT

Initial Therapy

- Otherwise healthy patient with no risk factors and mild to moderately severe illness
  - No specific treatment required, usually resolves within weeks
- Patients with severe or prolonged illness, prominent hilar adenopathy, presence of risk factors:
  - Fluconazole 400 mg daily for three to six months, or until asymptomatic and IgG antibody titer ≤ 1:4

Monitoring

- Monitor titer initially every two to four weeks and then every three months until titer ≤ 1:4. Persistence of titer > 1:4 indicates persistent infection or dissemination
- Residual asymptomatic nodules and cavities do not require treatment; monitor chest-x-ray at intervals of six months or more for at least two years

CHRONIC PULMONARY COCCIDIOIDOMYCOSIS

- Develops in up to 5% of patients
- Prolonged respiratory and constitutional symptoms, chest x-ray changes, persistently elevated IgG antibody titers
- May initially require intravenous antifungal (Amphotericin B), followed by prolonged course of oral antifungal therapy
- Ruptured cavities require surgical intervention
- Consider infectious disease or coccidioidomycosis specialist consultation

DISSEMINATED COCCIDIOIDOMYCOSIS

- Manage in collaboration with infectious disease / coccidioidomycosis specialist
- Develops in less than 1% of patients
- CNS infection / meningitis may present with headache, altered level of consciousness, tachycardia, hypotension
- Joint involvement often presents as monoarticular arthritis
- Vertebral coccidioidomycosis can cause spinal/paraspinal abscess and cord compression
- Skin involvement may indicate disseminated disease elsewhere
- Can involve bone (osteomyelitis), endocrine glands, eye, liver, kidneys, genital organs, prostate, peritoneum
- Usually requires intravenous antifungals, followed by prolonged (often lifelong) high dose oral antifungal therapy

*Refer to the CCHCS Coccidioidomycosis Care Guide for more detailed discussion of the diagnosis, treatment and monitoring of coccidioidomycosis in CDCR institutions.