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Examples Highlights

Clinical Points of Interest

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Disclosure

- Nothing to disclose
- These are best described as case examples. ADHS does not provide direct patient care. In Arizona, direct patient care is provided by local health departments, as well as hospitals and correctional facilities.
 - In this presentation, Cocci = Coccidioidomycosis aka Valley Fever

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There is value for TB programs in “thinking cocci” when “thinking TB”

- 38 year old, US born white male, hospitalized in another state with possible TB. LUL cavity on x-ray. Public health concern as he is an airline pilot who travels internationally.
- Plan: 3 sputums for AFB smear and culture, including NAA.
- Statistically, most likely to be cocci. Online clinical resources on Cocci available.

Clinical Snapshot

- Chief complaint: worsening cough and chest tightness x 5 days. Non-productive cough associated with left sided chest pain. Patient self reported crackles on breathing. Denies fever, hemoptysis, change in weight, nausea, vomiting, or wheezes.
- X-ray: LUL cavitary lesion.
- CT: 3.3 x 3.7 x3.9 cm LUL cavitary mass with a RUL 6 mm nodule.
- QFT: negative
- AFB smear neg x 3 on sputums (collected >8 hr apart).
- AFB smear neg on BAL.
- Cocci IgG: positive (0.557)
- Cocci CF Antibody: 1:8

**Ruled out as “not TB”
All 3 sputums & BAL sent
for AFB culture. Did not
grow out MTB.**

7,636
reported cocci

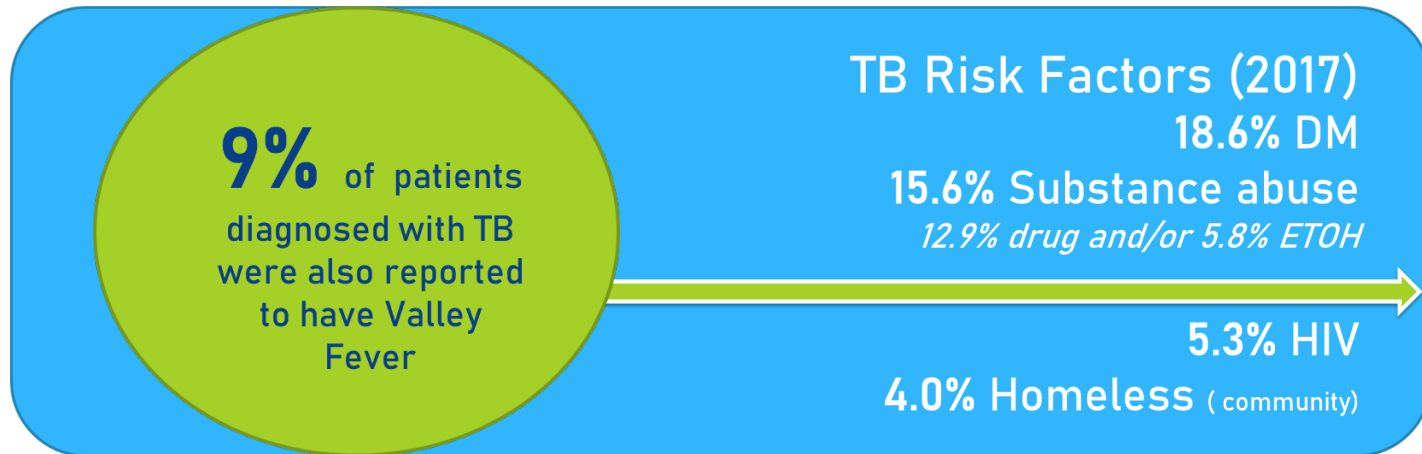
2018
AZ

44x's

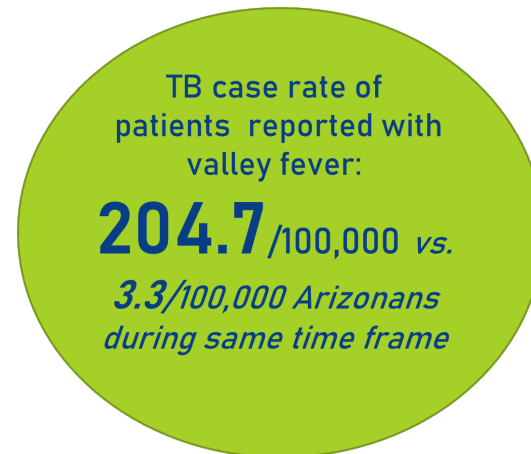
178
reported
TB

2

Cocci diagnosis does not exclude TB disease



62x's



Clinical Snapshot

50 yr old, white, US born male. Retired from US military >10 years ago, including overseas deployments to Asia. Former smoker with 25 year pack history. Quit 9 years ago.

Month 0: onset of symptoms: cough, night sweats, unintentional weight loss, fatigue

Month 3: Xray detected cavitory lesion LUL. Started fluconazole

Month 5: Biopsy showed non-necrotizing granulomatous inflammation with necrosis. AFB stain neg. Referred for sleep apnea.

Month 7: new diagnosis DM

Month 9: LUL lobectomy. Cavity had increased despite 5 months of Fluconazole. Had lost 60+ pounds over 8 months. BMI 27.8

**Lung Fluid 4+ AFB.
Necrotizing granulomatous inflammation with numerous mycobacteria.**

**Day after surgery: QFT done.
Positive.**

**5 days after surgery: 1st sputum
collected. NAA detected MTB.
Smear negative. RIPE started.**

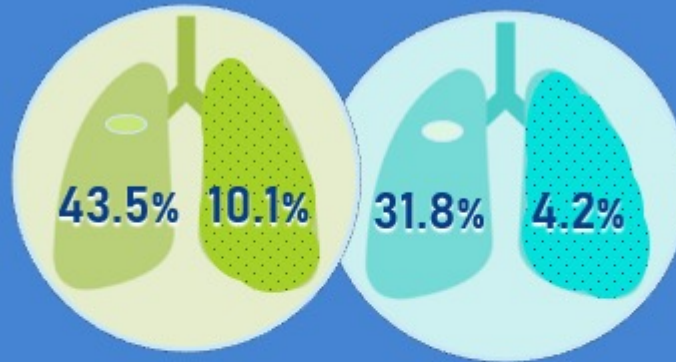
**1st month of TB treatment:
readmitted to hospital for
reasons not related to TB**

**By 4th month of TB treatment:
Symptoms resolved. Back at
work. Switched from 7 days/wk
treatment to 3 days/wk DOT
with 900 mg INH and 600 mg
RIF. Susceptible to all first line
medications. Genotype
associated with the Philippines.
No epi link within Arizona.**

**6 months: Treatment
completed.**

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TB (even with concurrent cocci) is curable



Dual diagnoses were more likely than TB to be cavitory (OR 1.65; 95%CI: 1.16-2.35) and/or miliary (OR 2.58; 95%CI: 1.40-4.76)

No difference found in TB treatment outcomes

Clinical Snapshot

- 60 yr old, white US born male. Smokes 1 ppd. DM.

Hospitalized for 6 weeks for:

- Disseminated TB involving bone marrow, adrenal and pulmonary tuberculosis (started tx 3 1/2 wks after admission)
 - Coccidioidomycosis
 - Acute respiratory failure & pneumonia (resolved)
 - Sepsis with associated hypotension (resolved)
 - Hemorrhagic shock (resolved)
 - Acute renal failure (resolved)
- Chief complaint: Abdominal pain, headache, SOB. Subjective fevers, no weight loss. Denied cough. 6 months history of mediastinal lymphadenopathy, lost to follow up due to insurance issues.
 - TB suspected when granulomatous disease found on bone marrow biopsy as well as adrenal and lung biopsy.
 - QFT done and came back positive.
 - Smear neg BAL grew out MTB.
 - Xray abnormal: interstitial markings throughout both lungs.

Successful outcome with outpatient TB management

- Case management challenges included insurance issues. Local TB program worked to get him on insurance. Also ensured that he was able to get access to Fluconazole.
- After release from hospital, successfully treated for 39 weeks for Pansusceptible TB.



- Persistent cough?
- Constant fatigue?
- Fever or night sweats?
- Weight loss?
- *¿Tos constante?*
- *¿Cansancio constante?*
- *¿Fiebre o sudores nocturnos?*
- *¿Pérdida de peso?*

**Ask your doctor to test you for
Tuberculosis or Valley Fever **TODAY!****

***¡Solicite a su médico hacerle exámenes de
Tuberculosis o Fiebre del Valle **AHORA!*****

