TB & Covid-19 Cases

James Sunstrum, M.D.
Westland, Michigan

2 problems to deal with

Missing diagnosis of TB when COVID-19 present
• Both cause lung infiltrates
• Both may have chronic stages
• 20% drop in reported TB cases in 2020
• Was this drop due to missing TB cases, or reduced local transmission of TB?

Managing TB during COVID-19 pandemic
• Staff pulled off TB work
• Contact investigations difficult
• Disrupted healthcare system

Case 1: 61 yr male from India with COVID-19
• Hospitalized 2 weeks April 2021
• Treated with corticosteroids, remdesivir, vancomycin, cefepime
• Readmitted May 2021
• Treated with prednisone, doxycycline
• Quantiferon TB Gold positive
• Discharged on 3 liters oxygen
TB Clinic

- On nasal oxygen
- Scattered lung crackles
- 2 sputum AFB smears negative
- M.Tb NAAT negative.
- Prednisone stopped

**IMPRESSION**
- Severe post COVID hypoxia
- Latent TB infection
- Plan to treat latent TB once stabilized.

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**Case #2: 5 yr female with COVID-19**

- Hospitalized March 2020
- COVID-19 RNA positive
- Progressive deterioration with neurological abnormalities
- Extensive microbiological workup negative, including AFB smears and NAAT
- Day 30 brain biopsy SARS-CoV2 RNA +++
- Expired
Case #2: 5 yr female with COVID-19

- Brain biopsy showed COVID-19 viral particles and necrotizing granulomas
- Post-mortem tracheal aspirates and brain biopsy grew *M. tuberculosis*
- TB was drug susceptible
- No family member with latent or active TB identified

Case #2: 5 yr female with COVID-19 and TB meningitis

- Genotype and whole genome sequencing showed exact match to a local case of pulmonary TB
Case #2: 5 yr female with COVID-19 and TB meningitis

- Extensive epidemiological investigation (in midst of first pandemic wave) could not link child to this case
- Could there be another contagious pulmonary TB case in community??????

As we pull out of the COVID-19 pandemic

- Re-organizing TB control staff
- Patients with chronic complaints returning to healthcare settings
- Will we see increase in new TB cases that were “hiding”?