Conclusion. Elevated ESR at the end of treatment could be used as a marker to identify spinal TB patients with a poor prognosis. Patients whose ESR are not normalized during treatment, as well as those with old age and AFB smear positivity, should be aware of unfavorable outcomes.

Disclosures. All authors: No reported disclosures.

1367. Tele-TB: Using TeleMedicine to Increase Access to Directly Observed Therapy for Latent Tuberculosis Infections
Megan L. Donahue, MD; Matthew Eberly, MD; David Stagliano, MD; Michael Rajnik, MD; Walter Reed National Military Medical Center, Bethesda, Maryland

Session: 153. Mycobacteria
Friday, October 4, 2019: 12:15 PM

Background. Otherwise healthy patients with latent tuberculosis infection (LTBI) have a 10 percent lifetime risk of progression to active TB disease. This risk is higher in recently exposed persons, young children, and the immunocompromised. Treatment of LTBI decreases the risk of progression. However, traditional treatment regimens required either daily isoniazid (INH) for 9 months, with historically poor compliance, or 12-week directly-observed therapy (DOT) with INH and rifapentine (RPT), with improved compliance but challenges of coordinating weekly clinic visits, further complicated if patients must travel a great distance for care and/or miss considerable amounts of time from work or school to attend encounters.

Methods. Our referral area is complicated by congested traffic often resulting in one-way commutes in excess of 2 hours. These travel times would be prohibitive for conducting traditional weekly in-clinic DOT. In an effort to improve access to DOT, we implemented TeleMedicine LTBI DOT within a military pediatric infectious diseases clinic. Local providers were requested to refer patients aged two and older diagnosed with LTBI to our DOT TeleMedicine clinic. All patients without absolute contraindications for receiving INH and/or RPT were offered LTBI treatment via weekly TeleMedicine DOT or daily INH. If the family opted for TeleMedicine DOT, the first visit was performed in person to discuss treatment options, demonstrate use of the TeleMedicine software, and to ensure the patient was able to take the medications. Baseline information about patient travel time to our facility for patients enrolled in the LTBI DOT clinic was determined.

Results. To date, seven patients have completed LTBI treatment via TeleMedicine DOT. Average one-way travel time to our facility for patients participating in the TeleMedicine DOT was 72 minutes. Actual time spent in the TeleMedicine DOT encounters was less than 10 minutes. Appointments were arranged to take place outside usual school and work hours so patients could complete DOT with minimal interruptions to daily life, resulting in 100% treatment compliance and completion.

Conclusion. Conducting DOT using TeleMedicine is a viable and time-saving measure that still allows for high levels of patient compliance and treatment completion while minimizing interruptions to academic and work schedules.

Figure 1: Average One-Way Travel and Appointment Times for In-Person and TeleMedicine DOT Encounters

Disclosures. All authors: No reported disclosures.

1368. Tuberculosis in Older Patients in Cali, Colombia (2011–2016): A Hospital-Based Cohort Study
Jose Fernando Garcia-Goez, MD; Juan Diego Velez, MD; Jessica Pino-Escobar, MD; Barbara Lucia Mora, MD; Claudia M. Parra, MD; Joan A. Caylak, MD PhD; Jose M. Miró, MD, PhD; Fundación Valle del Lili, Cali, Valle del Cauca, Colombia; Fundación de la Unidad d’Investigación en Tuberculosis (FuirTB), Barcelona, Catalunya, Spain; Hospital Clinic-IDIBAPS, University of Barcelona, Barcelona, Catalunya, Spain

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Background. Tuberculosis (TB) in older adults is a public health concern worldwide. We aim to describe the outcomes of patients over 65 years old with a confirmed TB diagnosis. We furthermore assessed factors related to poor outcomes among this patient population.

Methods. This retrospective study included patients older than 65 years with a biological specimen positive by smear microscopy, culture, or GeneXpert. Clinical and microbiological data, information about drug-related side effects, adverse reactions, and TB treatment outcomes were reviewed. Patients were subsequently assigned to either the octogenarian group or non-octogenarian group, also the treatment success group or treatment nonsuccess group.

Results. A total of 108 patients were included. 59% were male, and 26% of patients were 80 years old or older. 81% of the patients presented pulmonary TB. Diagnostic delay greater than 90 days was present in 36% of the cases. There was a statistically significant difference in the rates of diabetes (P = 0.004) and COPD (P = 0.017) between the octogenarian group and non-octogenarian group. One hundred six patients started anti-TB therapy, 34% of cases were lost to follow-up, and 18% died. Patients of 65–79 years of age and those older than 80 years had similar mortality. 19% vs. 18%, respectively. When comparing treatment success (n = 45) and nonsuccess (n = 22) groups, most of the variables were found not to be statistically significant as TB risk factors, except malignancy (P = 0.013). Overall, survival of the patients was 78.23% at 5 years follow-up; there were no differences between age groups.

Conclusion. The presence of baseline comorbidities as diabetes, malignancies and COPD, diagnosis delay, adverse events during anti-TB treatment and drug–drug interactions (DDI) makes this age group a different population, hence care models need to be evaluated to improve the indicators of the success of TB programs. Furthermore, the significant losses to follow-up require strict management of these patients and optimal coordination among health centers.

Disclosures. All authors: No reported disclosures.

1369. Clinical Manifestations, Treatment, and Outcome of Nontuberculous Mycobacteria (NTM) Infection in Adult-Onset Immunodeficiency Associated with Anti-interferon-gamma Autoantibodies in King Chulalongkorn Memorial Hospital
Kamonwan Jittvorakool, MD; Jakapat Vanichnan, MD; King Chulalongkorn Memorial Hospital, Bangkok, Krung Thep, Thailand

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Background. There is an increase of anti-interferon-gamma autoantibodies syndromes because it is now well recognized, especially in the Southeast Asia region. One of the clinical features is an infection caused by nontuberculous mycobacteria (NTM). NTM infection in patients with anti-interferon-gamma autoantibodies is usually severe, recurrent, and disseminated. In this study, we describe the clinical characteristics, treatment, and outcome of NTM infection in patients with anti-interferon-gamma autoantibodies.

Methods. A retrospective cohort study was conducted at the King Chulalongkorn Memorial Hospital, Bangkok, Thailand, during 2010–2018. Demographic, clinical, and microbiological data were collected and analyzed.

Results. A total of 45 patients were enrolled in this study: Twenty-nine patients were males, and 16 patients were females. The most common clinical manifestations...
were fever with lymphadenopathy. The median age of the study population was 55 years. The most common organ that was infected was the lymph node (91%). Sweet’s syndrome (68%) was the most common immunological skin reaction. The proportion of infection caused by rapid-growing NTM was more prevalent than slow-growing NTM. The most common NTM was Mycobacterium abscessus (44.4%). The most common strain pathogen identified in this study was Salmonella (37.4%). All patients had positive antibody to interferon-y in serum which was detected by enzyme-linked immunosorbent assay (ELISA) and mean optical density was 3.28. Fifty-one percent of the patients received long-term antymycobacterial therapy due to chronic active infection, new infections and relapsed. 22.2% of the patients developed a new infection during treatment. However, 28.9% of patients were completely cured of the infection during the follow-up period. The overall mortality rate was 11.1%.

**Conclusion.** Adult-onset immunodeficiency with anti-interferon-y autoantibodies is a unique clinical syndrome that has been recognized in Thailand. Treatment of this disorder requires a long duration of the combination of antymycobacterial agents. Sweet’s syndrome is an indicator of recurrence/relapse of NTM infection during the clinical course. Long-term monitoring and immunomodulator are essential for the management of this condition.

**Disclosures. All authors:** No reported disclosures.

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**1370. Concurrent Anti-PD -1 and Anti-tubercular Therapy in a Patient with Refractory Lymphoma and Pulmonary Tuberculosis: A Case Report**

Sumanth Rajagopal, MD; Vu Nguyen, MD; Kaiser Permanente Medical Center, Oakland, California

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**Background.** Safety and efficacy of concurrent treatment for tuberculosis and checkpoint inhibitor drugs are unknown.

**Methods.** Case report.

**Results.** A 36-year-old gentleman presented with bulky adenopathy in December 2016. Work-up revealed classical Hodgkin’s lymphoma with extra-nodal sites of involvement including bone, lung and skeletal muscle. After his disease proved refractory to the standard first and second-line treatments, complete remission was achieved with anti-CD 30 drug-toxin conjugate, brentuximab followed by consolidation with autologous stem cell transplant in February 2018. However, his lymphoma recurred in June 2018 with new bulky adenopathy and new bilateral nodal pulmonary infiltrates. PET imaging revealed multiple adiv lymph node, liver and bone lesions. Biopsy of a neck node confirmed relapsed lymphoma. Cultures of sputum revealed drug-susceptible M. tuberculosis. Four drug treatment with Isoniazid, Rifampin, Ethambutol and Pyrazinamide was initiated in June 2018. Hospice enrollment was considered because of progressive lymphoma and poor functional status. In July 2018, patient elected for a trial of salvage treatment with Nivolumab, a PD-1 checkpoint inhibitor (CPI) while on anti-tubercular treatment. He was monitored for paradoxical worsening of symptoms. He tolerated the tuberculosis medications well for the entire 6-month course, follow-up sputa were culture negative. His lymphoma remains in remission on maintenance nivolumab as a donor search is underway.

**Conclusion.** Autoimmune reactions and immune-related adverse events are major side effects of CPI drugs. Our understanding of the interplay between checkpoint inhibitors and infectious risks continues to evolve. Among the few cases reported in the literature, patients on CPIs have experienced both reactivation of latent tuberculosis as well as severe, fatal paradoxical reactions during treatment of active tuberculosis. Despite the relatively uncomplicated course in our patient, tuberculosis in this group of patients poses many challenges in diagnosis and management and warrants close monitoring and follow-up.

**Disclosures. All authors:** No reported disclosures.

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**1371. Tuberculosis and HIV Coinfection in the Bahamas: A Retrospective Review of Cases Diagnosed Between 2014 and 2016**

Javardo Mcintosh, MBBS; Kevin Moss, MD, FACP; Nikkiah Forbes, MBBS, DM; M. Anthony C. Frankson, MBBS, MPH; 1Princess Margaret Hospital, Nassau, The Bahamas; Dearborn, Michigan; 2Princess Margaret Hospital, Nassau, New Providence, Bahamas; 3The University of the West Indies, Nassau, New Providence, Bahamas

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**Background.** Tuberculosis (TB) is one of the oldest diseases known to man, yet the world health organization reports that TB is one of the top 10 causes of death worldwide. HIV infection is the most potent biologic risk factor for developing tuberculosis. The HIV epidemic has been responsible for increasing the burden of TB worldwide and The Bahamas has been no exception. The aim of this study was to determine the HIV testing rate as well as prevalence of TB-HIV coinfection for The Bahamas and compare cases of TB based on HIV status for clinical presentation, radiologic findings, and smear and culture results.

**Methods.** A retrospective chart review of cases of Tuberculosis diagnosed at the Princess Margaret Hospital, Nassau, Bahamas. 189 cases of active tuberculosis diagnosed between 2014 and 2016 and all cases were evaluated for demographics, risk factors, HIV status, clinical manifestation, radiologic findings, and smear and culture results.

**Results.** Of the 189 cases of notified tuberculosis between 2014 and 2016, 109 (59.9%) were HIV negative and 73 (40.1%) were HIV positive. For patients who were HIV positive, 54(74%) were previously diagnosed with HIV and 19(26%) were newly diagnosed. Of the patients who were previously diagnosed with HIV, 14(25.9%) were on antiretroviral (ARV) medications and compliant, 34(63.0%) were on ARVs and noncompliant and 6(11.1%) were not on ARVs. 4(8.2%) patient had a CD4 count ≥500, 8(16.3%) patients had a CD4 count between 499-200 and 37(75.5%) had a CD4 counts 1000. HIV is a major risk factor for Tuberculosis in the Bahamas and it is advised that all patients diagnosed with TB be tested for HIV. Routine screening of HIV patients for TB is recommended. Noncompliance with antiretroviral therapy remains a public health issue as it increases susceptibility to TB infection.

**Table 1** Sociodemographic profile and risk factors of study participants

| Parameter | n (%) | Parameter | n (%) |
|-----------|-------|-----------|-------|
| Age (years) | | | | |
| <20 | 33 (17.5) | Female | | |
| 20-40 | 65 (34.4) | | | |
| ≥40-60 | 70 (37.0) | | | |
| ≥60 | 21 (11.1) | HIV Status | | |
| Known | | Status known | | |
| 182 | | HIV Negative | 109 (59.9) |
| Mean (SD) | 37.96 ± (8.120) | HIV Positive | 73 (40.1) |
| Nationality | | Status not known | 7 |
| Bahamian | 115 (60.8) | Diabetes Mellitus | | |
| Foreign Born | 74 (39.2) | Cigarette Smoker | 35 (18.5) |
| Haitian | 67 (35.4) | ETOH use | 24 (12.7) |
| Jamaican | 5 (2.6) | Travel to Endemic area | 14 (7.4) |
| Other | 2 (1.1) | IB/ TB contact | 24 (12.7) |

**Table 2** Characteristics of TB-HIV Co-infected patients

| Parameter | | | | |
| HIV Diagnosis (of 73) | Newly Diagnosed | Previously Diagnosed | ARV Medications of 54 |
| | | | | |
| | 19 (26) | | 34 (63.0) |
| | | | | |
| | 20 (27) | | 33 (60.5) |
| | | | | |
| | 20 (27) | | 30 (57.1) |
| | | | | |
| | 20 (27) | | 24 (45.3) |
| | | | | |
| | 20 (27) | | 24 (45.3) |
| | | | | |
| | 20 (27) | | 24 (45.3) |
| | | | | |
| | 20 (27) | | 24 (45.3) |

**Diagnosis of TB in HIV positive patients**

| | | | | |
| Present with Symptoms | | | | |
| CD4 Count (cells/μL) (of 49) | | | | |
| | | | | |
| >500 | | | | |
| 400-499 | | | | |
| 200-399 | | | | |
| 100-199 | | | | |
| <100 | | | | |
| Not on ARV | | | | |
| On ARV and non-compliant | | | | |
| On ARV and compliant | | | | |

**Conclusions.** There was no increase in tuberculosis cases among HIV positive patients in The Bahamas.