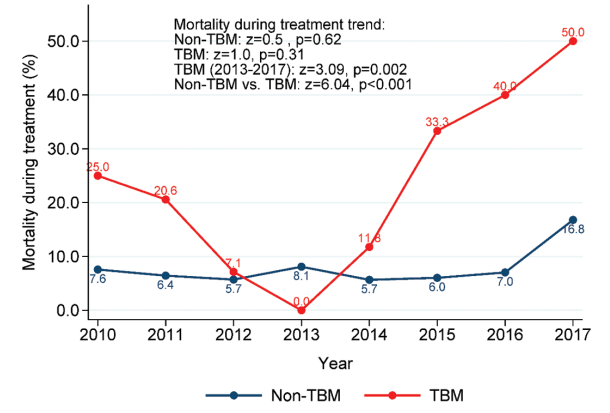

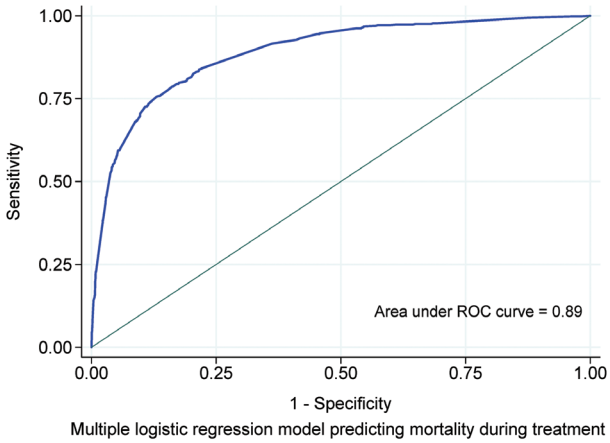

Multiple logistic regression model predicting mortality during treatment

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

779. *Mycobacterium tuberculosis* Prosthetic Joint Infections: A Case Series and Literature Review

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Background. *Mycobacterium tuberculosis* is a rare cause of prosthetic joint infection (PJI), as most countries with high prevalence of tuberculosis have limited access to arthroplasty. We aimed to characterize the diagnosis, the management, and the outcome of *M. tuberculosis* PJI.

Methods. All cases of *M. tuberculosis* PJI documented in a network of 7 referral centers in France were retrospectively reviewed. Data were collected from medical files on a standardized questionnaire, including diagnosis, management, and outcome. In addition, we performed a systematic literature review using the keywords"prosthetic joint," and"tuberculosis."

Results. During years 1997–2016, we managed 13 patients (8 males, 5 females, median age 79 years [range, 60–86]) with documented *M. tuberculosis* PJI, involving hip (n = 6), knee (n = 6), or shoulder (n = 1). Median time from arthroplasty to PJI diagnosis was 9 years [0.4–20]. The diagnosis was obtained on joint aspirates (n = 9), or synovial tissue (n = 4). PCR was positive in all cases tested (5/5). Median duration of antituberculosis treatment was 14 months [6–32]). Nine patients underwent surgery: debridement (n = 4), definitive resection arthroplasty (n = 3), and revision arthroplasty (1-stage exchange, n = 2). PJI was controlled in 12 patients. One patient died of disseminated tuberculosis. The literature review identified 70 additional cases of documented *M. tuberculosis* PJI, with a favorable outcome in 79% (11/14) of patients with no surgery, 85% (11/13) with debridement and prosthesis retention, 86% (19/22) with revision arthroplasty, and 81% (17/21) with definitive prosthesis resection (NS).

Conclusion. *M. tuberculosis* PJI can be controlled with prolonged antituberculosis treatment in most cases, with or without surgical treatment.This case series and literature review suggest that the paradigms for the management of *M. tuberculosis* PJI may differ from PJI related to other pathogens, for which surgery is required.

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

780. Incidence and Prevalence of Nontuberculous Mycobacterial Lung Disease in US Medicare, 2008–2015

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Session: 70. Tuberculosis and Other Mycobacterial Infections
Thursday, October 4, 2018: 12:30 PM

Background. Previous research has reported nontuberculous mycobacterial lung disease (NTMLD) prevalence of 47 per 100,000 among Medicare beneficiaries ≥65 years in 2007, with an average increase of 8.2% annually between 1997 and 2007. In this study, we have evaluated NTMLD incidence and prevalence in Medicare between 2008 and 2015.

Methods. Patients diagnosed for NTMLD with an ICD9 031.0 were identified from the Medicare database (N≈30 million yearly), not including the Part C portion. Individuals who incurred at least 2 medical claims ≥30 days apart between 2007 and 2015 were considered as a positive NTMLD case, yielding 58,294 patients. All individuals fulfilling the case definition each calendar year were considered as prevalent cases. Incident cases included those meeting case criteria and who did not have a Medicare claim for NTMLD in the prior year. Poisson regression was used to estimate yearly confidence intervals. ARIMA models were used to forecast incidence and prevalence over 2016–2025.

Results. Patients with NTMLD in the Medicare database had a mean age of 74 (standard deviation: ±10) years. Sixty-nine percent were women and 89% white. Yearly NTMLD incidence increased from 20.7 (95% CI: 20.2–21.3) in 2008 to 28.1 (27.5–28.7) in 2013 per 100,000 Medicare beneficiaries and leveled to 27.6 (26.9–28.2) in 2014 and 25.9 (25.3–26.5) in 2015 per 100,000. Yearly NTMLD prevalence increased throughout the observation period from 41.6 (40.9–42.3) in 2008 to 63.1 (62.2–64.0) in 2015 per 100,000 Medicare beneficiaries. Incidence was 28.1 vs. 14.7 per 100,000 in 2015 in Medicare beneficiaries ≥65 years vs. those <65 years, respectively. Prevalence was 70.2 vs. 27.9 per 100,000 in 2015 in Medicare beneficiaries ≥65 years vs. those <65 years, respectively. In 2015, incidence and prevalence were higher in women than men (33.9 vs. 16.0/100,000 and 86.2 vs. 34.6/100,000, respectively) and among individuals of Asian origin compared with White (41.1 vs. 27.6/100,000 and 89.4 vs. 68.7/100,000, respectively). The 10-year incidence and prevalence forecasts were presented in figures.

Conclusion. In US Medicare beneficiaries, NTMLD incidence increased from 2008 through 2013 and leveled off in more recent years, while NTMLD prevalence continued to rise through 2015.