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***Nocardia beijingensis*: A Novel Isolate Affecting Immunocompromised Patients in the United States**

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Table 1. Results of TB testing.

Period	Test used	Number of samples	Number of patients	Number of positive patients	% positive samples	% positive patients
1.1.2017 to 31.10.2017	Xpert MTB/RIF	461	344	10	2.17	2.91
1.1.2018 to 31.10.2018	Xpert MTB/RIF Ultra	571	372	25	4.38	6.72

Disclosures. All authors: No reported disclosures.

1354. *Nocardia beijingensis*: A Novel Isolate Affecting Immunocompromised Patients in the United States

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Background. *Nocardia* species can cause localized or disseminated disease in humans. Infection results from direct inoculation or inhalation. In recent years, several new species have been identified via molecular methods. Further speciation is crucial as each organism has its own spectrum of disease and unique antibiotic susceptibility patterns. Immunosuppression, alcoholism, and certain lung diseases are well-established risk factors for nocardiosis. In fact, cases have incremented in association with increasing population of immunocompromised hosts as well as improved methods for detection and identification. Thus, *Nocardia* species may be considered opportunistic pathogens.

Nocardia beijingensis was first isolated in 2001 by Wang et al from sewage soil in China. The first human infections were reported in Asia. Subsequently, cases were reported in Europe and a few cases have been described in the United States but it has been infrequently cited in the literature. Thus, not much is known about its spectrum of disease.

Methods. The primary objective of this study was to determine the risk factors and clinical manifestations of *Nocardia beijingensis* infection via retrospective chart review of 6 cases identified in Tampa General Hospital and Moffitt Cancer Center within a 5-year period. We aimed to evaluate the treatment used and the antibiotic susceptibility patterns of the isolates.

Results. All patients were immunocompromised (1/3 HIV/AIDS, 1/3 hematologic malignancy, 1/3 solid-organ transplant). Most were male (67%) and mean age of 48. The majority had lung involvement (67%). Thecal sac infection and femur osteomyelitis (OM) were atypical manifestations. Localized disease predominated. Combination therapy was preferred. Trimethoprim-sulfamethoxazole (TMP-SMX), Ceftriaxone, and carbapenems were mostly used. All isolates were susceptible to TMP-SMX. See Table 1.

Conclusion. This case series depicts clinical features, risk factors, and epidemiology of *Nocardia beijingensis* infections. Our observations suggest that it is a novel pathogen in the United States, affecting mainly immunocompromised hosts. Early detection, appropriate antibiotics, and surgery were keys in successful management. However, further studies are needed to further elucidate its pathogenesis.

Table 1. Case Description

Case Number	1	2	3	4	5	6
Age	32	41	50	34	59	72
Gender	F	F	M	M	M	M
Risk Factors	HIV/AIDS, alcohol abuse	Kidney transplant (KT), steroids, uncontrolled diabetes, immunosuppressant (IS)	Multiple myeloma, chemotherapy, steroids, yardwork	HIV/AIDS, homeless, concomitant mycobacteria lung infection	Acute myelogenous leukemia, stem cell transplant, steroids, IS, prior nocardiosis	KT, IS, steroids, concomitant zygomycoses
Symptoms	confusion, lumbar pain, lower extremity weakness	left thigh abscess	fever, dry cough, severe headache	fever, productive cough, hemoptysis	asymptomatic	fever, dyspnea
Imaging	thecal sac infection, epidural abscesses (figure 1)	femur osteomyelitis (figure 2)	pulmonary nodules, multiple ring enhancing brain lesions	cavitary lung lesions	pulmonary nodules	cavitary pneumonia
Disease Extent	localized	localized	disseminated	localized	localized	localized
+ Culture	abscess	abscess	bronchial tissue	sputum	lung nodule	BAL
Antibiogram						
TMP-SMX	+ S	+ S	+ S	+ not done	+ S	+ S
Carbapenem	+ S	+ S	+ I	-	- S	- S
Ceftriaxone	+ TS	+ S	+ S	-	+ S	- S
Minocycline	- TS	- I	- I	-	+ I	- S
Linezolid	- S	- S	+ S	-	- S	- S
Amikacin	- S	- S	- S	-	- S	- S
Surgery	+	+	-	-	-	-



Disclosures. All authors: No reported disclosures.

1355. Efficacy and Tolerability of Linezolid Adjunctive Treatment for Nontuberculous Mycobacterial Infection in Patients with Acquired Anti-Interferon-Gamma Autoantibody

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Background. Despite a long duration of combined oral antimycobacterial drugs, relapse/ reinfection of nontuberculous mycobacteria (NTM) is common among patients with anti-interferon gamma autoantibodies (anti-IFN-γ auto-Abs).

Methods. We reported here, an interim analysis of the prospective study of 25 patients with anti-IFN-γ auto-Abs, who received oral linezolid (LZD) adjunctive treatment for their NTM infections, at Siriraj Hospital, Bangkok, Thailand, between December 2017 and April 2019.