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Tsukamurella tyrosinosolvens Respiratory Infection in Immunocompetent Man

Appendix

Appendix Table. Summary table of previously described *Tsukamurella sp.* respiratory tract infections

First author (year)	Details	Risk factors	Clinical presentation	Radiology	Diagnostic method and species	Treatment
Menard et al, 2009 (1)	54M with <i>Tsukamurella</i> bronchitis and bacteremia	Lung transplant, α -1 antitrypsin deficiency	Fever and productive cough for 2 weeks	N/A	<i>T. tyrosinosolvens</i> confirmed using 16S and hsp65 sequencing	Imipenem and tobramycin
Maalouf et al, 2009 (2)	74M with <i>Tsukamurella</i> pneumonia	COPD and Non-Hodgkins Lymphoma	4 d of fever, cough and dyspnoea	CXR: Bilateral perihilar alveolar infiltrates	<i>Tsukamurella pulmonis</i> confirmed using 16S	Vancomycin and meropenem. Switched to 10 d oral ciprofloxacin and rifampin. Rifampin and levofloxacin for 6 mo.
Perez et al, 2008 (3)	71M with cavitating lung lesion	Lung adenocarcinoma	3 mo of productive cough, hemoptysis, fevers, night sweats	CT: LUL cavity	<i>Tsukamurella pulmonis</i> diagnosed with biochemical methods	Oral ciprofloxacin and rifabutin for 12 weeks. Started HRZE. Changed to ciprofloxacin and azithromycin for 2 mo. Empiric augmentin and azithromycin. Switched to 2 weeks ciprofloxacin. Levofloxacin for 6 weeks
Alcaide et al, 2004 (4)	55M with cavitary pneumonia	AIDS, T-cell lymphoma and COPD	2 weeks of cough, fever, malaise.	CT: multiple cavities with patchy areas of consolidation.	<i>Tsukamurella</i> genus diagnosed with biochemical methods.	Oral ciprofloxacin and rifabutin for 12 weeks. Started HRZE. Changed to ciprofloxacin and azithromycin for 2 mo. Empiric augmentin and azithromycin. Switched to 2 weeks ciprofloxacin. Levofloxacin for 6 weeks
Mehta et al, 2011 (5)	79M with strep pneumoniae and <i>Tsukamurella</i> pneumonia	Emphysema	10 d of productive cough and fever	CT: Right upper lobe dense infiltration.	<i>Tsukamurella sp.</i> diagnosed with chromatography	Started HRZE. Changed to ciprofloxacin and azithromycin for 2 mo. Empiric augmentin and azithromycin. Switched to 2 weeks ciprofloxacin. Levofloxacin for 6 weeks
Inchingolo et al, 2010 (6)	76F with polymicrobial pneumonia	COPD on home O ₂	2 of days confusion and dyspnoea	CXR: diffuse bilateral alveolar consolidation and ground glass changes	<i>T. pulmonis</i> diagnosed with 16S sequencing.	Started HRZE. Changed to ciprofloxacin and azithromycin for 2 mo. Empiric augmentin and azithromycin. Switched to 2 weeks ciprofloxacin. Levofloxacin for 6 weeks
Romano et al, 2011 (7)	70M with septic pulmonary emboli	Lung carcinoma, long-term central venous catheter, chemotherapy	Fever, Chills, dyspnoea and chest pain	CT: Bilateral pulmonary nodules	<i>T. tyrosinosolvens</i> by 16S rRNA sequencing	19 d of linezolid
Yang et al, 2017 (8)	24 F with pneumonia	None	20 d of fever and cough	CT: Small cavitary lesion and consolidation	<i>Tsukamurella</i> by 16S rRNA sequencing	Co-trimoxazole for 4 mo.
Sandhu et al, 2022 (9)	77M with atypical pneumonia	Asthma, lobectomy	Chronic cough, acute weakness, fevers, chills, night sweats.	CT: multiple regions of nodular parenchymal opacities.	<i>Tsukamurella</i> , unclear diagnostic method	Co-trimoxazole for 4 mo.
Liu et al, 2022 (10)	72M with <i>Tsukamurella</i> pneumonia misdiagnosed as TB	Daily dexamethasone, recurrent pneumonia	Productive cough and chest tightness	CT: L pyopneumothorax and RUL cavity	<i>T. tyrosinosolvens</i> identified using mass spectrometry post-mortem	Initial HRZE, then meropenem and linezolid

First author (year)	Details	Risk factors	Clinical presentation	Radiology	Diagnostic method and species	Treatment
Kuge et al, 2022 (11)	82F with <i>Tsukamurella</i> bronchiectasis misdiagnosed as NTM	Previous <i>M. chelonae</i> respiratory infection	Productive cough and hemoptysis	CT: Centrilobular nodules and bronchiectasis	<i>T. toyonakaense</i> identified using Multi Locus Sequence Typing and whole genome sequencing	20 y erythromycin. Patient declined clarithromycin with ethambutol therapy.
Gotoh et al 2021 (12)	44F with septic pulmonary embolism	Central venous catheter and cisplatin chemotherapy	High fever during chemotherapy and radiotherapy	CT: Bilateral pulmonary nodules consistent with septic pulmonary emboli	<i>T. inchonensis</i> by <i>groEL</i> sequencing	Imipenem and cilastatin for 4 weeks
Swier et al 2022 (13)	73F with exacerbation of bronchiectasis	Bronchiectasis	Worsening cough and sputum production with weight loss	N/A	<i>Tsukamurella sp.</i> by 16S rRNA sequencing	N/A
Manek et al, 2019 (14)	42M with recurrent pleural effusion	None	Chest pain and shortness of breath	CXR: R sided pleural effusion	<i>T. pulmonis</i> (diagnostic method not described)	Initial HRZE. Then 2 mo levofloxacin and rifabutin for 3–6 mo.
Candelario et al, 2019 (15)	80F with frequent exacerbations of COPD	COPD	Worsening productive cough	CT chest: emphysematous changes with multiple nodules	<i>T. pulmonis</i> diagnosed using 16S sequencing	2 mo azithromycin therapy
Rao et al, 2023 (16)	68F	Pulmonary fibrosis, past TB	Shortness of breath, fatigue and weight loss for 6 mo	CT chest- multifocal pneumonia with cavitary lesions	<i>Tsukamurella sp.</i> by chromatography	Levofloxacin & rifampin for 3 mo

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