

Persistent Mycobacterium abscessus Bacteremia with Pulmonary Involvement In a Haemodialysis Patient: An Underrecognised Cause of Disseminated Catheter-related Bloodstream Infection.

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INTRODUCTION

Mycobacterium abscessus, a rapidly growing non-tuberculous mycobacterium (NTM), is an increasingly recognised but uncommon pathogen of catheter-related bloodstream infections (CRBSIs), particularly in immunocompromised hosts and haemodialysis-dependent patients. Diagnosis is often delayed due to non-specific symptoms and empirical antibiotics lacking NTM coverage, posing diagnostic and therapeutic challenges.

CASE PRESENTATION

We present a case of a 62-year-old woman with diabetes, hypertension, ischaemic heart disease, and end-stage renal disease on haemodialysis, who presented with two days of breathlessness and reduced effort tolerance following incomplete dialysis. She was febrile but haemodynamically stable. Empirical intravenous (IV) amoxicillin-clavulanate and azithromycin were initiated for suspected pneumonia, then escalated to IV cefepime due to persistent fever and rising CRP. Serial blood cultures, taken five days apart from peripheral vein and dialysis catheter, grew Mycobacterium abscessus complex. Susceptibility testing showed sensitivity to amikacin (MIC 16 µg/mL) and clarithromycin (MIC 0.5 µg/mL), with intermediate resistance to imipenem (MIC 16 µg/mL). Whole-body CT revealed lung and pleural nodules suggestive of dissemination. The catheter was removed, and she received IV imipenem and amikacin for two months, resulting in fever resolution and CRP normalisation. Treatment was transitioned to oral azithromycin and clofazimine, planned for one year due to persistent bacteremia with pulmonary involvement. She remained clinically stable at five-month follow-up.

CONCLUSION

This case highlights Mycobacterium abscessus as an emerging cause of persistent CRBSI in haemodialysis patients. Prompt catheter removal, susceptibility-guided antimicrobial combination therapy, and evaluation for dissemination are crucial for successful outcomes.