

LETTER TO THE EDITOR

Tularemia in a Kidney Transplant Recipient

To the Editor:

Tularemia, a zoonotic bacterial illness caused by *Francisella tularensis*, is extremely infectious and potentially fatal, especially in immunocompromised hosts such as bone marrow or solid organ transplant recipients.¹ Tularemia in the posttransplant period has been reported rarely in the literature. Here, we present a case of glandular tularemia in a 24-year-old male kidney transplant recipient who presented 12 months after transplant with cervical lymphadenopathy. Pathologic examination of the lymph node biopsy showed chronic necrotizing granulomatous inflammation, which suggested tuberculous lymphadenitis. However, because the patient lived in a region in which tularemia is endemic, a real-time polymerase chain reaction–based test for tularemia was performed on the lymph node specimen and found to be positive. When subjected to an *F tularensis* microagglutination test, the patient's serum also was positive at a titer of 1:320. Aminoglycosides were not administered due to possible nephrotoxicity; instead, he was started on treatment with doxycycline, 100 mg, twice daily for 4 weeks. At the latest follow-up, cervical lymphadenopathy had resolved and the patient was asymptomatic.

Tularemia rarely has been reported in transplant recipients. We could identify only 4 published cases, including a case in a liver transplant recipient,² 2 cases in bone marrow transplant recipients,^{3,4} and one prior case in a kidney transplant recipient⁵ (Table 1). Three of the 5 patients had systemic presentation of tularemia and one died.

A high level of suspicion, prompt diagnosis, and institution of effective antibiotic therapy are required for the management of tularemia in the posttransplant period, especially in endemic areas.

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Table 1. Characteristics and Outcomes of Posttransplant Tularemia Cases

Reference	Case	Comorbid Conditions	Immunosuppression	Method of Diagnosis	Antimicrobial Treatment	Outcome
Limaye & Hooper ²	3 y post–liver Tx; aged 50 y; septicemia, pneumonia	DM, HTN, ESRD, HCV	Prednisolone, 10 mg, azathioprine, 75 mg	Blood culture	Levofloxacin, 500 mg/d, for 21 d	Complete recovery
Naughton et al ³	7 mo post–bone marrow Tx; aged 61 y; pulmonary nodule	AML	No GVHD prophylaxis	Tissue culture	Ciprofloxacin, 750 mg, 2×/d for 6 wk	Complete recovery
Sarria et al ⁴	2 d post–bone marrow Tx; aged 43 y; septicemia, inguinal LAP	ALL	High-dose chemotherapy ^a	Blood culture	Imipenem-cilastatin, vancomycin, gentamicin	Deceased
Khoury et al ⁵	6 y post–kidney Tx; aged 69 y; septicemia, pneumonia	PKD	MMF, prednisone, rapamycin	Blood culture	Doxycycline for 14 d	Complete recovery
This report	1 y post–kidney Tx; aged 24 y; cervical LAP	None	MMF, prednisolone, tacrolimus	Tissue PCR and serology	Doxycycline, 100 mg, 2×/d for 4 wk	Complete recovery

Abbreviations: ALL, acute lymphoblastic leukemia; AML, acute myeloid leukemia; DM, diabetes mellitus; ESRD, end-stage renal disease; GVHD, graft-versus-host disease; HCV, hepatitis C virus; HTN, hypertension; LAP, lymphadenopathy; MMF, mycophenolate mofetil; PCR, polymerase chain reaction; PKD, polycystic kidney disease; Tx, transplant.

^aDrugs not reported.