What Are the Clinical Manifestations, Radiological Presentation, Risk Factors for Severity, Treatment, and Outcome of Legionnaires Disease in Solid Organ Transplant?



STUDY DESIGN

Retrospective, 10-year, multicenter cohort study (France) of Legionnaires disease in patients with solid organ transplant using hospital discharge databases

Diagnosis based on:

- + Respiratory culture
- + Urine antigen test
- + Serology

RESULTS



101 patients identified

- 63.4% kidney transplant
- 5.6 years (median) from transplant to Legionnaires disease
- 56% → ICU admission (severe Legionnaires disease)



Severe Legionnaires disease associated with:

- Negative urine antigen at presentation (P = .047)
- Lymphopenia (*P* = .014)
- Respiratory symptoms (*P* = .010)
- Pleural effusion (P = .039)



Chest CT scan showed:

- Alveolar consolidation 98%
- Ground-glass opacity 63%
- Macronodules 21%
- Cavitation 8.8%



Diabetes associated with 12-month mortality

HR 3.2 (95% CI, 1.19 to 8.64)

Legionnaires disease is a late and severe complication occurring in recipients of solid organ transplantation.