Update on Nontuberculous Mycobacteria

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Mycobacterium Avium Complex

- Microbiology
  - M. avium
  - M. Intracellulare
- Isolated from soil, water, plants, animals
- Pathogens in poultry and swine
- Slow growing, nonchromogen, variable colony morphology

Epidemiology: Isolation Prevalence of Pulmonary Mycobacteria in Ontario

![Graph showing isolation prevalence of various mycobacteria in Ontario from 1997 to 2003.](image)
Clinical Syndromes

- Pulmonary
  - Nodular, Tree-in-bud, Cavitary
- Lymphatic
- Disseminated Disease
- Extrapulmonary

“TB-like” Cavitary Disease

M. Avium and tobacco
MAC and Lung Cancer

M. Avium and smoking

- Lady Windermere Syndrome
- Female, post-menopausal, non-smoking
- Right middle lobe and lingular disease
- Pectus excavatum and mitral valve prolapse
- Indolent
- Reinfection with new strain

M. Intracellulare s/p breast cancer and XRT

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M. Avium and M. abscessus co-infection
Pleural based nodular MAC

Cystic Fibrosis

MS/R347H/ΔF508

M. Intracellulare and MZ (pre-op)
M. Avium and SZ phenotype

- Better culture methods
- Multiple mycobacterial pathogens
- Routine respiratory pathogens

Bronchiectasis with MAC and Pseudomonas

Rheumatoid Arthritis
Rheumatoid Arthritis
RF 1:1280
On plaquenil only
M. Avium infection

T-cell receptor defect