



# **NONTUBERCULOUS MYCOBACTERIUM INFECTION**

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# Diagnostic criteria

## CLINICAL AND MICROBIOLOGIC CRITERIA FOR DIAGNOSING NONTUBERCULOUS MYCOBACTERIAL LUNG DISEASE\*

### Clinical (both required)

1. Pulmonary symptoms, nodular or cavitary opacities on chest radiograph, or a high-resolution computed tomography scan that shows multifocal bronchiectasis with multiple small nodules

and

2. Appropriate exclusion of other diagnoses

### Microbiologic

1. Positive culture results from **at least two** separate expectorated **sputum** samples .  
If the results from (1) are nondiagnostic, consider repeat sputum AFB smears and cultures

or

2. Positive culture result from **at least one bronchial wash** or **lavage (BAL)**

or

3. **Transbronchial or other lung biopsy** with mycobacterial histopathologic features (granulomatous inflammation or AFB) **and positive culture for NTM**  
**or** biopsy showing mycobacterial histopathologic features (granulomatous inflammation or AFB) **and one or more sputum or bronchial washings that are culture positive for NTM**

# SYMPTOM AND SIGN

## PULMONARY INFECTION

### ⊙ Adolescents : progressively

- ⊙ Chronic cough and sputum production
- ⊙ Hemoptysis
- ⊙ Chest pain
- ⊙ Fever c chill, night sweat
- ⊙ Weight loss
- ⊙ Fatigue, malaise

### ⊙ Younger children : cough and failure weight gain

### ⊙ Physical examination

- ⊙ Rhonchi
- ⊙ Crackles
- ⊙ Wheezes

# RADIOGRAPHIC

## ⊙ Adolescents

- cavitation with or without fibrosis
- nodule
- nonspecific pulmonary infiltrates
- adenopathy, pleural effusion is rare
- abnormalities : apical lung or bilateral

## ⊙ Children

- adenopathy is common
- collapse-consolidation
- similar to those found with primary tuberculosis.

# TREATMENT *M. kansasii*

## ❖ Regimen recommendation : ATS/IDSA 2007

<b>INH</b>	<b>+</b>	<b>Rifampin</b>	<b>+</b>	<b>Ethambutol</b>
5 mg/kg/day		10 mg/kg/day		15 mg/kg/day

- ❖ Availability of rifampin outcome therapy improved dramatically
- ❖ All isolated of *M. kansasii* are resistant to pyrazinamide
- ❖ Treatment duration should 18 months (adult) with at least 12 months of negative sputum culture.