The Leeds Method of Management. April, 2008. Non-tuberculous mycobacterium [online]. Leeds Regional Adult and Paediatric Cystic Fibrosis Units, St James's University Hospital, Leeds, UK. Available from http://www.cysticfibrosismedicine.com

Non-tuberculous mycobacterium isolated

1. **Review patient using 1997 ATS criteria[1]**
2. **Consider immunological review**

Meet criteria

Don't meet criteria

Rapid grower

Mycobacterium avium

Observe

First line

IV amikacin 35 mg/kg od (IV)
Imipenem 500mg qds (IV)
Clarithromycin 500mg bd (oral)

Treat for 2-4 weeks until clinical response.

Maintenance therapy

Neb amikacin + oral clarithromycin 500mg bd (+/- ethambutol / rifampicin).

Consider routine courses of IVs every three months.

Second line

Consider using IV cefoxitin 3g qds and IV Tigecycline, 100mg bd for 24 hr loading, 50mg bd thereafter, for acute deterioration in addition to/in place of first line agents.

Consider a short course (one month) of linezolid 600mg bd for *M. chelonae / fortuitum*.

Consider adding in moxifloxacin 400-800 mg of for *M. fortuitum.*

Consider Interferon?

Role of surgery?

First line

Clarithromycin 500mg bd (oral)
or Azithromycin 250mg od (oral)
Rifampicin 450-600mg od (oral)
Ethambutol 12-25mg/kg od (oral)

Reduce Azithromycin to 3x week when stable.

Treat until culture negative for one year.

Second line

Consider adding Neb/IV amikacin

Third line

Consider adding Moxifloxacin 400-800mg od and/or Linezolid 600mg bd.

1997 ATS criteria

Clinical symptoms
CT Changes
Microbiology

Over twelve month period

Three positive cultures (smear negative).

OR

Two positive cultures plus one smear positive.

OR

Strong positive smear / culture from BAL.

[1]NB: They can only be applied to *M. abscessus* AND *M . avium* and they are not validated for patients with CF.

Rapid growing Mycobacteria – *M. abscessus, M. chelonae, M. fortuitum.*

*For paediatric doses - discuss with Pharmacist..