Empirical antimicrobial therapy for children with Non-Cystic Fibrosis Bronchiectasis

Purpose

This guideline provides recommendations regarding best practice for empirical antimicrobial therapy for paediatric patients with non-cystic fibrosis (CF) bronchiectasis, for inpatient and outpatient management. For advice on antimicrobial therapy for patients with pulmonary exacerbations or chronic colonisation with Pseudomonas aeruginosa, Methicillin resistant Staphylococcus aureus and atypical micro-organisms, please contact the Queensland Children’s Hospital Infection Specialist consultant team for advice.

Scope

This guideline provides information for Children’s Health Queensland staff caring for paediatric CF and non-CF bronchiectasis patients.

Related documents

Procedures, Guidelines, Protocols

- Hospital In The Home (HITH) Outpatient Parenteral Antimicrobial Therapy Prescribing, Administration and monitoring guideline
- CHQ-PROC-01035 Antimicrobial Restrictions – Antimicrobial Stewardship (AMS)
- CHQ-GDL-01221 Immunisation Guideline for Medically at Risk Children
- CHQ-GDL-01061 Use of Azithromycin in Children with Non-Cystic Fibrosis Bronchiectasis or Chronic Suppurative Lung Disease

Other

- CHQ Antimicrobial Restriction list
Empirical antimicrobial therapy for patients with non-CF bronchiectasis

Figure 1. Non-CF bronchiectasis exacerbation

Non-CF Bronchiectasis exacerbation

Outpatient Management

Amoxicillin-Clavulanic acid
25mg/kg/dose ORAL 12-hourly of DUO preparation (Max 875mg Amoxicillin component/dose)

OR

Trimethoprim-Sulfamethoxazole
# 4mg/kg/dose ORAL 12-hourly (Max 160mg/dose Trimethoprim component)

Comment:
# Alter therapy based on previous microbiology if available

Inpatient Management

Cefotaxime IV 50mg/kg/dose 6-hourly (Max 2gram/dose)

OR

Ceftriaxone IV 100mg/kg once daily (Max 4gram/day)

Comment:
# Alter therapy based on previous microbiology if available
Consultation

Key stakeholders who reviewed this version:

- Paediatric Respiratory Consultant Team (CHQ)
- Paediatric Infectious Diseases Consultant team (IMPS, CHQ)
- Antimicrobial Stewardship Pharmacist (CHQ)

List of abbreviations

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References and suggested reading


Guideline revision and approval history

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<tr>
<td>1.0 (replaces CHQ-GDL-01059)</td>
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Keywords

- non-CF bronchiectasis, exacerbation, inpatient management, outpatient management, antimicrobial stewardship, cefotaxime, ceftriaxone, amoxycillin-clavulanic acid, trimethoprim-sulfamethoxazole, 01072

Accreditation references

- NSQHS Standards (1-8) -
  - **Standard 3**: Preventing Controlling Healthcare-Associated Infection
  - **Standard 4**: Medication Safety