

Paediatric bronchiectasis checklist

For health professionals



Lung
Foundation
Australia

This checklist is designed to help you to manage your paediatric patient's bronchiectasis. You should be able to answer **YES** to all of these questions.

Diagnosis

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| <input type="checkbox"/> | The diagnosis of bronchiectasis has been confirmed by a chest CT scan using paediatric criteria. | A chest CT scan, preferably a multidetector with high resolution (HRCT) scan, is needed to confirm the diagnosis of bronchiectasis. Paediatric, rather than adult, criteria should be used (broncho-arterial ratio >0.8) to diagnose bronchiectasis in those with a compatible clinical syndrome. |
| <input type="checkbox"/> | A panel of tests to investigate for possible underlying causes has been undertaken. | The recommended panel of tests for all children with bronchiectasis is: (a) Full blood count; (b) Major immunoglobulin classes G, A, M, E; (c) Sweat test; (d) Culturing lower airway secretions, including specialised cultures for mycobacterial species in sputum-producing patients (consider referring for induced sputum or bronchoscopy in those unable to expectorate sputum); and (e) Spirometry when age appropriate, usually in those aged >six years.

Additional investigations for uncommon underlying causes are to be considered on a case-by-case basis in discussion with a specialist (e.g. for primary ciliary dyskinesia, inhaled foreign body, pulmonary aspiration, extended immunological testing, including HIV). |

Bronchiectasis-specific management

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| <input type="checkbox"/> | The child and parent have been taught an airway clearance program by a Respiratory Physiotherapist. | A personalised daily airway clearance routine is necessary. An airway clearance program may include breathing exercises, positive expiratory pressure devices (PEP), percussion (chest patting), blowing games, and aerobic exercise. The techniques change with age and should be reviewed at least every six months. |
| <input type="checkbox"/> | The child and parent have been shown how to use their devices and their device use technique has been checked by the healthcare team. | If the child is prescribed an airway clearance device or an inhaled medication delivery device, they should be shown how to use each device correctly, receive written instructions on the technique and the child's technique checked. |
| <input type="checkbox"/> | There is an up-to-date bronchiectasis management plan. | Each child's day-to-day baseline symptoms are different. For each child, an up-to-date BAMP which provides instructions on routine treatment when they are clinically stable and how this is escalated for an exacerbation should be available. |
| <input type="checkbox"/> | The child is regularly reviewed by a multidisciplinary team. | Bronchiectasis may change over time and monitoring symptoms is important. A review should be undertaken at least six monthly by a multidisciplinary team led by a specialist respiratory physician. Monitoring includes any changes in baseline status, culturing sputum (when possible), measuring lung function, and seeking and managing the presence of co-morbidities. |

- Medications are regularly reviewed.** Regular review of medications is necessary. Offer anyone with >one hospitalisation or >three non-hospitalised exacerbations in the previous 12 months, a six month trial of macrolide (azithromycin) antibiotics. Assess their response after six months.
- Bronchiectasis-specific education is provided.** Being informed about bronchiectasis is important. Parents can call Lung Foundation Australia on 1800 654 301 to access bronchiectasis information, support and resources. See also crelungs.org.au and improveBE.org.
- Routine vaccinations are up-to-date.** In addition, annual influenza vaccinations, and from age four years, two doses of 23-valent pneumococcal polysaccharide vaccine (Pneumovax 23) given five years apart, are recommended to reduce the risk of an exacerbation, particularly during winter. COVID-19 vaccination following public health guidelines will also reduce the risk of severe illness from COVID-19.
- I communicate with the child's health team.** Communication between the specialist respiratory physician and the child's family doctor is important. The family doctor should receive a letter from their specialist every time they are reviewed.

General management

- Regular exercise is encouraged.** The aim of daily exercise is to improve fitness, reduce symptoms of breathlessness and fatigue, and improve quality of life. It may also assist in clearing mucus from the lower airways.
- Monitor growth, diet and the child's nutritional needs.** The child's growth, appetite, diet and nutrition are regularly monitored.
- Child and family wellbeing.** Chronic conditions may affect the child and their family. Enquire about the family's general wellbeing and if necessary, refer for help.
- Offer smoke and vaping cessation therapies if relevant.** Enquire about tobacco smoke and/or vaping (e-cigarette) exposure.

Find out more

For more information for you and your patients, please visit the Lung Foundation Australia website lungfoundation.com.au.

The Australian Bronchiectasis Registry (ABR) collects data on bronchiectasis patients to facilitate research, improve clinical management practices and maximise opportunities for patients to participate in clinical trials. If you work with patients at a hospital or health service and would like to contribute, please contact free call 1800 654 301 or email abr@lungfoundation.com.au.

lungfoundation.com.au | Freecall 1800 654 301 | enquiries@lungfoundation.com.au