

# Acute bronchitis

Acute bronchitis is a clinical diagnosis presenting as a cough +/- sputum, and usually has a viral aetiology. Acute bronchitis is a very common presentation to Australian general practice, managed at a rate of about two per 100 encounters and is the fourth most commonly managed new problem overall. While almost always a mild and self-limiting illness, acute bronchitis can be challenging for GP registrars to manage due to concern about missing more serious illness e.g. pneumonia, as well as managing patient expectations for antibiotic treatment.

<b>TEACHING AND LEARNING AREAS</b> 	<ul style="list-style-type: none"> <li>• Aetiology and natural history of acute bronchitis</li> <li>• Differential diagnoses of acute cough in children and adults</li> <li>• Red flags for serious causes and indication for investigations</li> <li>• Management strategies, including dealing with patient expectations for antibiotics</li> </ul>		
<b>PRE-SESSION ACTIVITIES</b>	<ul style="list-style-type: none"> <li>• Read the 2016 AAFP article <a href="#">Acute Bronchitis</a></li> </ul>		
<b>TEACHING TIPS AND TRAPS</b> 	<ul style="list-style-type: none"> <li>• Atypical bacteria are rare causes of acute bronchitis</li> <li>• Fever is not typical of acute bronchitis after the first few days</li> <li>• Purulent (green) sputum is not predictive of bacterial infection and is not in itself an indication for CXR</li> <li>• Consider pertussis in patients with a cough persisting for more than two weeks and features such as paroxysmal cough, whooping, and post-tussive vomiting</li> <li>• Symptoms of acute bronchitis usually last for 2-3 weeks but can last for up to 8 weeks – advising patients of the natural history is essential</li> <li>• Don't order chest x-rays in patients with uncomplicated acute bronchitis – <a href="#">Choosing Wisely Australia</a></li> <li>• Consider pneumonia (and imaging) in patients with tachypnoea, tachycardia, dyspnoea, or lung findings suggestive of pneumonia</li> <li>• <a href="#">There is limited evidence to support the use of antibiotics in acute bronchitis</a></li> <li>• <a href="#">Delayed prescribing significantly decreases antibiotic use</a></li> <li>• The strongest predictor for an antibiotic prescription is the GPs perception of patient desire for antibiotics!</li> <li>• Over-the-counter cough medications should not be used in children younger than six years because of the high potential for harm</li> <li>• Avoid using beta2 agonists for the routine treatment of acute bronchitis unless wheezing is present</li> </ul>		
<b>RESOURCES</b> 	<table border="1"> <tr> <td data-bbox="338 1818 434 1975"><b>Read</b></td> <td data-bbox="434 1818 1497 1975"> <ul style="list-style-type: none"> <li>• 2008 Canadian Family Physician article <a href="#">Acute bronchitis</a></li> <li>• Therapeutic Guidelines chapter on cough</li> <li>• <a href="#">MJA CICADA: Cough in Children and Adults: Diagnosis and Assessment. Australian Cough Guidelines summary statement</a></li> </ul> </td> </tr> </table>	<b>Read</b>	<ul style="list-style-type: none"> <li>• 2008 Canadian Family Physician article <a href="#">Acute bronchitis</a></li> <li>• Therapeutic Guidelines chapter on cough</li> <li>• <a href="#">MJA CICADA: Cough in Children and Adults: Diagnosis and Assessment. Australian Cough Guidelines summary statement</a></li> </ul>
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<b>FOLLOW UP &amp; EXTENSION ACTIVITIES</b>	<ul style="list-style-type: none"> <li>• Registrar to undertake clinical reasoning challenge and discuss with supervisor</li> </ul>		



# Acute bronchitis

## Clinical Reasoning Challenge

Kim Short, a 38-year-old teacher, presents to you with a 12-day history of a wet cough productive of green sputum. She describes having a typical head cold at the start which has since resolved. She is a non-smoker. She is travelling to Bali in a few days' time and is keen for something to 'knock it on the head'.

You suspect acute bronchitis.

QUESTION 1. What are the MOST IMPORTANT key features of history and examination to explore that Kim has uncomplicated acute bronchitis? List up to SIX.

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

QUESTION 2. Further assessment is unremarkable. Which of the following symptomatic treatments are recommended? Choose as many as appropriate.

- |  |   |
|--|---|
| <input type="checkbox"/> Ibuprofen                     | <input type="checkbox"/> Antihistamines |
| <input type="checkbox"/> Expectorants e.g. guaifenesin | <input type="checkbox"/> B-agonists     |
| <input type="checkbox"/> Opioid cough suppressants     |   |

QUESTION 3. Kim is keen for a prescription for antibiotics as she is going on holidays. List three strategies you can use to reduce antibiotic use in patients with acute bronchitis.

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

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## ANSWERS

### QUESTION 1

What are the MOST IMPORTANT key features of history and examination to explore that Kim has uncomplicated acute bronchitis? List up to SIX.

Absence of:

- Fever
- Haemoptysis
- Dyspnoea
- Past chronic lung disease
- Abnormal vital signs (HR>100, RR>24, T>38)
- Abnormal respiratory examination

### QUESTION 2

Further assessment is unremarkable. Which of the following symptomatic treatments are recommended? Choose as many as appropriate.

- Ibuprofen – no benefit
- Antihistamines – no benefit
- Expectorants e.g. guaifenesin – some benefit
- B-agonists – no role unless wheeze present
- Opioid cough suppressants – marginal benefit over placebo

### QUESTION 3

Kim is keen for a prescription for antibiotics as she is going on holidays. List three strategies you can use to reduce antibiotic use in patients with acute bronchitis.

- Discuss the aetiology and natural history of acute bronchitis (90+% viral, can last for many weeks)
- Discuss the limited role for antibiotics (Cochrane evidence) and potential adverse effects of antibiotics
- Use a delayed prescription