BTS guidelines for the management of community acquired pneumonia in adults: update 2009

### Synopsis of recommendations

#### Section 1 Introduction

1.1 Scope of these guidelines
1.2 Introduction
1.3 Definitions
1.4 What is the target end user audience?
1.5 What patient populations are we including and excluding?

1.6 What changes have happened in the area of CAP since the 2004 guidelines?
1.7 Guidelines Committee membership
1.8 How the evidence was assimilated into the guidelines
1.9 Grading of recommendations
1.10 Plans for updating these guidelines
1.11 Implementation of the guidelines
1.12 Auditing CAP management

#### Section 2 Incidence, mortality and economic consequences

2.1 How common is adult CAP in the community and in hospital?
2.2 What is the mortality of CAP?
2.3 What are the economic consequences of CAP?
2.4 What comments can be made about cost effectiveness of different therapies?

#### Section 3 Aetiology and epidemiology

3.1 Introduction
3.2 What are the causes of adult CAP in the UK?
3.3 What are the causes of adult CAP in similar populations elsewhere in the world?
3.4 How does the aetiology differ in certain geographical areas
3.5 Is the aetiology different in specific population groups?
3.6 What are the epidemiological patterns of pathogens causing CAP and is this information useful to the clinician?

#### Section 4 Clinical features

4.1 Can the aetiology of CAP be predicted from clinical features?
4.2 Specific clinical features of particular respiratory pathogens
4.3 CAP in elderly patients: are risk factors and clinical features different?
4.4 Aspiration pneumonia

#### Section 5 Radiological, general and microbiological investigations

5.1 When should a chest radiograph be performed in the community for patients presenting with suspected CAP?
5.2 When should a chest radiograph be performed in hospital for patients presenting with suspected CAP?
5.3 Are there characteristic features that enable the clinician to predict the likely pathogen from the chest radiograph?
5.4 What is the role of CT lung scans in CAP?
5.5 How quickly do chest radiographs improve after CAP?
5.6 When should the chest radiograph be repeated during recovery and what action should be taken if the radiograph has not returned to normal?
5.7 What general investigations should be done in a patient with suspected CAP in the community?
5.8 What general investigations should be done in patients admitted to hospital?
5.9 Why are microbiological investigations performed in patients with CAP?
5.10 What microbiological investigations should be performed in patients with suspected CAP in the community?
5.11 What microbiological investigations should be performed in patients admitted to hospital with CAP?

#### Section 6 Severity assessment

6.1 Why is severity assessment important?
6.2 What clinical factors and investigations are associated with a poor prognosis on univariate and multivariate analysis?
6.3 What predictive models for assessing severity on or shortly after hospital admission have been tested?
6.4 What severity assessment strategy is recommended for CAP?
6.5 Severity assessment of CAP in patients seen in the community
6.6 Severity assessment of CAP in patients seen in hospital
6.7 Reviewing severity status after initial assessment in hospital

7.1 What general management strategy should be offered to patients treated in the community?
7.2 What review policy should be adopted in patients managed in the community?
7.3 What general management strategy should be offered to patients in hospital?
7.4 What advice should be given regarding critical care management of CAP?
7.5 What arrangements should be made for follow-up after hospital discharge and by whom?

8.1 Introduction
8.2 Antibiotic stewardship and the individual clinician’s responsibility to prevent the overuse of antibiotics when managing CAP
8.3 Antibiotic resistance of respiratory pathogens
8.4 Newer antibiotics
8.5 Clinical studies of management and international differences in recommendations
8.6 Formulations of these recommendations
8.7 Empirical antibiotic choice for CAP treated in the community
8.8 Should general practitioners administer antibiotics prior to hospital transfer in those patients who need admission?
8.9 When should the first dose of antibiotics be given to patients admitted to hospital with CAP?
8.10 Empirical antibiotic choice for adults hospitalised with low severity CAP
8.11 Empirical antibiotic choice for adults hospitalised with moderate severity CAP
8.12 Empirical antibiotic choice for adults hospitalised with high severity CAP
8.13 When should the intravenous or the oral route be chosen?
8.14 When should the intravenous route be changed to oral?
8.15 Which oral antibiotics are recommended on completion of intravenous therapy?
8.16 How long should antibiotics be given for?
8.17 Failure of initial empirical therapy
8.18 Antibiotic stewardship and avoiding inappropriate antibiotic prescribing for CAP
8.19 What are the optimum antibiotic choices when specific pathogens have been identified?
8.20 Specific issues regarding the management of Legionnaires’ disease
8.21 Specific issues regarding Panton-Valentine Leukocidin-producing Staphylococcus aureus

9.1 What factors and action should be considered in patients who fail to improve in hospital?
9.2 What are the common complications of CAP?

10.1 Influenza and pneumococcal vaccination
10.2 Smoking cessation

11.1 Membership of the BTS Community Acquired Pneumonia Guidelines Committee and affiliations
11.2 Authorship of sections of the guidelines
11.3 Acknowledgements
11.4 Declarations of interest

References

Checklist used by reviewers for appraising studies
Additional checklist used for appraising studies to inform pneumonia aetiology
Types of study and levels of evidence used to illuminate specific clinical questions
Generic levels of evidence and guideline statement grades, appropriate across all types of clinical questions