CHAPTER 1

Principles for the development of the guidelines

The committee for The Japanese Respiratory Society guidelines in management of respiratory infections

Principles for the development of the guidelines

In March 2000, the Japanese Respiratory Society (JRS) published ‘The Japanese Respiratory Society Guidelines for management of CAP’ to provide guidelines for the management of respiratory infections. Although published nearly 10 years later than the guidelines published in the United States and Europe, they have been well-received because they have had a favourable impact on the management of CAP in Japan. In addition to the guidelines, the JRS has been planning to publish booklets of guidelines for the management of hospital-acquired pneumonia (HAP), and respiratory tract infections as part of its guidelines for the management of respiratory infections, and this booklet is the second in the series. The format of this volume is almost exactly the same as the format of the first volume in the series, the ‘Practical guidelines for the management of community-acquired pneumonia in adults’.

In order to prepare of the guidelines more openly, the number of editorial committee members was increased, and we have received a wide variety of constructive suggestions and criticisms and had discussions with experts in other countries. However, as there may be many other issues to discuss, we developed the guidelines under ‘The Principles of development of the guidelines’ outlined in Table 1.

Hospital-acquired pneumonia has been defined as pneumonia that develops in inpatients at least 48 h or 72 h after admission to a hospital. In the guidelines, we define HAP as pneumonia in an inpatient that has developed at least 48 h after admission to the hospital. While it is relatively easy to make the diagnosis of CAP, it is often difficult to diagnose HAP, because the underlying disease may mimic HAP, and may mask or interfere with the symptoms and signs of pneumonia. It is also often difficult to take roentgenological examination, making it difficult to make a correct diagnosis of pneumonia. In other words, no ‘golden standard’ is available for the diagnosis of ‘HAP’. For this reason, care should be exercised in statistical analysis of the incidence of ‘HAP’, because patients’ background factors may vary to a considerable extent.

The rates of causative bacteria of HAP (‘causative bacteria’ in the guidelines, although ‘causative microorganisms’, strictly speaking) may vary with the region, hospital, patient background factors, and laboratory test methods. Since the causative bacteria and their antimicrobial sensitivity may vary greatly from hospital to hospital, it is necessary to conduct regular surveillance studies at each hospital, and ideally physicians should utilize the information for patient care.

The incidence of HAP has been reported to be 5–10 cases per 1000 hospitalized patients.1,2 Approximately 10% of ICU patients develop pneumonia, and the incidence of ‘HAP’ among patients who require mechanical ventilation is 20–30%. The incidence of ‘HAP’ is generally higher in large hospitals than in small hospitals, and the mortality rates are also higher in large hospitals.

Hospital-acquired pneumonia is the second most prevalent hospital-acquired infection, and its mortality is the highest among hospital-acquired infections. The mortality rate of HAP is generally believed to be 20–50%, and has been reported to be as high as 70% among patients with ventilator-associated pneumonia.

Thus, both morbidity and mortality rates of HAP are very high, so HAP is a major concern at hospitals with hospitalization facilities. Hospital-acquired pneumonia poses more complicated and difficult problems for hospital staff and employees than CAP, and medical workers are very much concerned about this issue in the hospital management. I sincerely hope that Basic Concepts for the Management of Hospital-acquired Pneumonia in Adults published by JRS will be helpful to healthcare workers engaged in the management of HAP.

The ‘pneumonia’ that is commonly seen in nursing homes for the elderly is not really HAP in the strict sense, because it is characterized by the features of both HAP and CAP. Since there has been increasing
Table 1  Principles for the preparation of the guidelines for the management of hospital-acquired pneumonia

1. Purpose:
   These guidelines are intended to be useful in improving the treatment of hospital-acquired pneumonia (HAP) in adults and ultimately to contribute to the promotion of public health.

2. Reliability
   A draft of the guidelines was developed at the Guideline Committee meeting and revised many times. We have made every effort to make it reliable by taking into considerations a wide range of suggestions and criticisms.

3. Applicability
   We have made an effort to make these guidelines widely applicable by taking all possible situations related to HAP into consideration. However, since the causative bacteria of HAP and the situation regarding drug-resistant bacteria may vary to a considerable extent depending on environment and hospital, the prevalence of pathogens and the use of antibacterial agents should be investigated at each hospital.

4. Flexibility
   Care should be exercised so that the guidelines are used properly. Exceptions, alternative treatments, and the handling of intractable cases are discussed in these guidelines.

5. Clarity
   These guidelines are simple and clear and summarized in a flowchart. Interpretations and footnotes will be added later.

6. Who should use these guidelines?
   These guidelines are intended for the management of HAP in various types of hospitals, and thus they are intended primarily for physicians and healthcare workers or the staff of every hospital.

7. Disadvantages
   Care should be exercised to ensure that no one experiences any disadvantages as a result of using these guidelines. The guidelines do not restrict clinical practice in any way. In other words, they describe recommended treatments for HAP, but no physicians are obligated to treat patients in accordance with these guidelines.

8. Recommended drugs
   The guidelines recommend a group of drugs for each category. In principle, trade names are not used.

9. Plans for investigations
   It is advisable to conduct a prospective study on the causative bacteria of HAP, the status of treatment of HAP, and the usefulness of this guideline.

10. Future plans
    The Guideline Enforcement Committee of the Japanese Respiratory Society should audit this guideline. The guideline should be revised when necessary.

demand for the development of guidelines for the diagnosis and treatment of the pneumonia commonly seen among residents of nursing homes for the elderly and we did not include them in the Guidelines for diagnosis and treatment of community-acquired pneumonia; this supplement has been prepared to meet this need.

A booklet entitled Basic Concepts for the Management of Hospital-acquired Pneumonia in Adults has been published, and the content can be seen on the website of the JRS. We tried to make it simple and easy to understand. The first half of the page is the ‘summary tables and figures’ for each chapter, and the second half is the figure legends. The first half of the page alone may meet the readers’ needs. Figure 1 in Chapter 5 is a grand summary, and it alone may well suffice for some readers’ needs.

A draft of Basic Concepts for the Management of Hospital-Acquired Pneumonia in Adults was placed on website of the JRS in November/December 2001. We also contacted the steering committee, board members, members who are merit award recipients, honorary members, and emeritus members of the Japanese Respiratory Society, medical associations of related disciplines, and manufacturers of antibacterial agents, and requested their criticisms. In response, we received some suggestions and advice, as well as requests for additions and editing. The manuscript committee members evaluated all the responses and considered them in preparing the final draft. There was also a request to standardise the terminology and writing style. We reviewed the draft several times in an attempt to meet all of the requests, but, since the revisions sometimes ran counter to the contributor's original intention, we were unable to completely standardise the terminology and the writing style. For example, we could not avoid using both 'causative bacteria' and 'pathogenic microorganisms', and we hope that readers will understand that such situations were inevitable because it is impossible for a single individual to prepare guidelines of this kind.

REFERENCES