Simultaneous pulmonary infection with respiratory syncytial virus and human cytomegalovirus

EDITOR.—Respiratory syncytial virus (RSV) is the major cause of acute lower respiratory illness in infants and young children. The presentation and natural course of RSV bronchiolitis may be atypical in the presence of a simultaneous infection with other viral agents.1 2 During the winter 1991–2, we studied children hospitalised for respiratory disease in a paediatric unit in Marseille. All patients were tested for viral infections and an information chart was made to determine the prevalence of multiple viral isolates and to assess the impact of dual infection and severity of clinical disease.

Between December 1991 and February 1992, 405 children were hospitalised for respiratory disease. In all cases, nasopharyngeal wash specimens were taken on admission to the paediatric unit and simultaneously submitted to human cytomegalovirus isolation and respiratory virus fluorescent antibody staining. For human cytomegalovirus isolation, specimens were inoculated on human embryonic lung fibroblasts and a monoclonal antibody directed against the immediate early antigen (E13, Biosoft, Clonatec, France) was added 48 hours later to detect viral antigen expression. Simultaneously, indirect immunofluorescence assay was performed directly on nasopharyngeal secretions, using monoclonal specific antibodies against several viruses: RSV, influenza A virus, influenza B virus, parainfluenza virus type 1, 2, and 3 (Monolhu kit, Pasteur, France), and adenovirus (Biosoft, Clonatec, France).

The following data was obtained for each patient: age, sex, history and clinical symptoms, other infections, duration of hospitalisation, socioeconomic status, and ethnic group.

From the 405 children hospitalised for bronchiolitis or respiratory disease, 198 (49%) presented viral infection: 165 were positive for RSV, 30 were positive for human cytomegalovirus, and three were simultaneously infected with RSV and human cytomegalovirus.

Given the frequency of RSV-human cytomegalovirus coinfection in our series (10%), we studied these 20 children: 11 were under 4 months old, hence they may have had congenital or perinatal human cytomegalovirus infection. However, six were from 6 months to 8 years old. One child had oral candidosis and one was simultaneously infected with Haemophilus influenzae and rotavirus, one had a history of pneumonitis, but all were without underlying disease. Their socioeconomic status were from low socioeconomic groups. Three were of Spanish extraction, seven were North Africans, and two were black children. No specific clinical situation was correlated with the coinfection: five had fever over 39°C, four had severe bronchitis or pneumonitis requiring corticotherapy. But the severity of the children’s illness was demonstrated by the duration of hospitalisation: the average was 6 days compared with 3-2 days in RSV isolated infection.

We especially noted the frequency of RSV-human cytomegalovirus simultaneous infections in the children hospitalised for lower respiratory tract infections or respiratory motor disorders. The prevalence of human cytomegalovirus in bronchiolitis remains unclear3 4 and further clinical and biological investigations should be undertaken.

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2 Tristram DA, Miller RW, McMillan JA, Weiner LB. Simultaneous infection with respiratory syncytial virus and other respiratory pathogens. Arch Dis Child: first published as 10.1136/adc.70.5.452-a on 1 May, 1994. Downloaded from http://adc.bmj.com/ on September 16, 2023 by guest. Protected by copyright.


Carers as children

EDITOR.—Aldridge and Becker in their article comment that there is uncertainty as to how many child carers there are.1 We have recently completed two surveys into the health and social care needs of children with multiple sclerosis in Bradford and Huddersfield. We surveyed over 500 people who agreed to volunteer. Of these, 51% were female. Approximately 40% of those with children under 16 years felt that their children helped more than they normally would with personal care. However, from the parents’ point of view it did not all seem to be bad. Approximately 40% felt that the multiple sclerosis had had little or no effect on their
BOOK REVIEWS


This book aims to be a practical guide to child health care in general practice. It is the result of extensive research and careful appraisal, and possible proactive intervention.

Availability of data tapes from national infant feeding surveys in 1985 and 1990

EDITOR.—The first national survey of infant feeding practices was in 1975. These surveys have been repeated every five years and are internationally acclaimed. They offer unique high quality information about how this country feeds its infants. The first survey covered England and Wales only, Scotland has been included from 1980, and in 1990 Northern Ireland has also joined in. Some 6000 new mothers, chosen as nationally representative of their population, provide information on three occasions: at 6 weeks, at 4 months, and at 9 months after their baby was born. Apart from gathering facts, the questionnaire also provides a rule to draw out the information about influences on the parents’ choices of how to feed their baby. The scope and style of the surveys can best be assessed by referring to the report of the most recent survey, which was published in 1992.1

The surveys were conducted by the Office of Population Censuses and Surveys for the Department of Health. Readers may wish to be aware that the full data tapes of the surveys in 1985 and 1990 is now available for independent researchers. It has become standard practice for the data tapes from diet and nutrition surveys to be deposited with the National Data Archive. Access to this information is available for request on this address: ESRC Data Archive, University of Essex, Wivenhoe Park, Colchester, Essex CO4 3SQ (Tel: 0206 872001).

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This is a rather unusual monograph devoted to phototherapy for neonatal jaundice. Its first edition appeared in 1980 and was written in German. This expanded version has both German and English editions and the original authors from Greifswald (formerly East Germany) have been joined by two contributors from Italy and one from Norway. I am not sure who was responsible for the translation from German but it can thus be stated that every hyperbilirubinemia is a condition requiring treatment and, apart from pathobiology and therapy, the only question to be discussed is the limits of the indication, needs some clarification.

The book is packed with information, some of which is useful and some much less so. Generally the clinical section is more helpful than basic physical principles, but the authors come over as dedicated advocates of phototherapy: ‘phototherapy is recommended for patients with a bilirubin level (170 μmol/L) up to the 5th day of life’. None of the ‘lighter touch’ here. To what extent bilirubin is of physiological importance as a scavenger of oxygen radicals in the neonatal period and whether it helps to prevent cerebral damage by oxygen radicals precisely during the treatment of newborns with hypoxia, is too speculative at present for any new therapeutic conclusions to be drawn from it. In other words, the use of phototherapy is unlikely to be harmful so if in doubt treat. If the reader wants to obtain a flavour of the recommendations of this monograph he could turn to p 155-9; Summary: phototherapy in the approach to the treatment of neonatal jaundice.

Recommended for reference in the local medical library rather than to buy.

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This is a major textbook on paediatric chest disease, of similar size to Kendig. There are 97 chapters and 127 contributors, all but two from North America. Chapters are grouped into sections. The first called ‘general information’ has five chapters: pulmonary mechanics, pulmonary defences, respiratory mucous, epidemiology, and self management programmes. The second considers evaluation, rather than diagnosis. The last called ‘management’ includes chapters on environmental control, surgical procedures, ventilatory support and resuscitation, and several chapters on drug pharmacology. The remainder consider disease categories. Each section is amply supported by diagrams, graphs, tables, radiographs, lists, and drawings. References up to 1991 are in the Vancouver style.

One striking omission is the exclusion of the management of respiratory infection in the developing world. The World Health Organisation recently claimed that its much publicised acute respiratory infection programme has resulted in a 25% reduction in mortality. If this is true the advance in the care of respiratory disease in children is surely worth mentioning. Diphtheria, another major disease with a huge mortality, is not mentioned at all.

This textbook compares very well with Kendig, a valuable source of references and information. But should a textbook not also be a learning tool? The problem with texts written by so many authors is that while all...