Progress in Respiratory Research

Vol. 38

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Paediatric Bronchoscopy

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Ten years ago, Praveen Mathur, Indianapolis, USA, and myself co-edited the book *Interventional Bronchoscopy* which was volume 30 in the series *Progress in Respiratory Research*. When we first presented the book at the European Respiratory Society congress in Madrid, we were overwhelmed by its success, and relatively soon the book was sold out and had to be reprinted. We thus realized that the topic had much broader appeal than we originally thought. Some time ago, I was approached by Kostas Priftis from Athens, Greece, who asked whether there might be interest for a similar book in paediatrics. I immediately showed my enthusiasm, and we quickly found a group of 5 eminent paediatric bronchoscopists who undertook to co-edit the now 38th volume of *Progress in Respiratory Research* entitled *Paediatric Bronchoscopy*. They are Michael Anthracopoulos, Patras, Greece; Ernst Eber, Graz, Austria; Anastassios Koubourlis, Washington, D.C., USA, and Rob Wood, Cincinnati, Ohio, USA. Between them they could get the help of some of the most eminent paediatric bronchoscopists from all over the world to cover every aspect pertaining to bronchoscopy in children. Thanks to the never failing commitment of the volume editors under the leadership of Kostas Priftis, all chapters came in on time and were carefully reviewed by the editors.

As any book on endoscopy needs illustrations, we encouraged chapter authors to supply as much material as possible, including their best educational videos. A careful selection took place to choose the best pictures for the print version of this volume; the best videos, on the other hand, can all be found in an online repository and can be downloaded for free by the purchaser of the book. We are happy to announce another feature ‘the electronic book’ version of *Paediatric Bronchoscopy*, which was first tested in the most recent volume 37 of the series, *Clinical Chest Ultrasound*, and generated a lot of interest. This virtual book gives the reader the option to read the whole text on the screen and read it by actually turning the pages, or directly jump to a certain chapter or illustration. Quite a revolution, which – I am sure – will appeal to many readers!

True to the spirit of the series, Paediatric Bronchoscopy is not just another textbook but has its emphasis on the most modern technical developments in and approaches to the art of bronchoscopy in children. Among other things this is reflected in all chapters having the latest references available incorporated.

Finally a big thank you to the production team at Karger, led by Thomas Nold, Linda Haas and Stefan Sessler, who have supported authors, editors and myself to bring out another state-of-the-art book in *Progress in Respiratory Research*. Enjoy it in print or on your screen!

C.T. Bolliger, Cape Town
Preface

Bronchoscopy has come a long way since the times of Gustav Killian, who in 1897 used a rigid hollow tube and with the help of a headlight inspected the airways of cadavers. It has also markedly advanced from the times of Chevalier Jackson, who introduced both the illuminated endoscope and the practice of interventional endoscopy by removing foreign bodies from the oesophagus and the airway (although it has been rather difficult to surpass his reported success rate of 98% and the reduction of mortality from 24 to 2%). It has also been a long way since 1967 when the flexible fibre-optic bronchoscope was introduced in adult pulmonary medicine. At the time, nobody thought that the technique would ever be applicable to children because in addition to the lack of appropriate equipment there were no paediatric pulmonologists who would demand it and perform the procedure.

In this respect, the history of flexible bronchoscopy in children mirrors the development of paediatric pulmonology itself. The introduction, in 1980, of a flexible fibre-optic bronchoscope small enough to allow the inspection of the airways of small infants and children by Robert E. Wood (then at Case Western Reserve University and later at the University of North Carolina, Chapel Hill) provided not only a new diagnostic tool, but also helped define the new subspecialty of paediatric pulmonology. Almost 30 years later, flexible bronchoscopy has become one of the core components of paediatric pulmonary training around the world and an indispensable tool of clinical practice and research.

The aim of the current volume in the series Progress in Respiratory Research is to provide the interested reader with a comprehensive review and insight into paediatric bronchoscopy. Although it is the first on this subject in the English literature, it is not intended to be a classical ‘textbook’ but rather a ‘state-of-the-art review’ on specific clinical and research topics on the subject. Both the introductory and closing chapters emphasize a view of what is anticipated for the future regarding the application of this technique.

The book is divided into three sections. The first section covers a wide spectrum of technical issues regarding the preparation for and the performance of flexible bronchoscopy, ranging from common applications such as bronchoalveolar lavage to the less common such as bronchial biopsy, interventional bronchoscopy and total-lung lavage. Separate chapters also present an in-depth review of the two major alternatives to flexible bronchoscopy, i.e. rigid bronchoscopy and ‘virtual’ bronchoscopy.

The second section of the book is devoted to the bronchoscopic appearance of the normal upper and lower airways as well as congenital and acquired abnormalities.

The third section deals with the application of paediatric bronchoscopy in specific clinical conditions including asthma, atelectasis and plastic bronchitis, cystic fibrosis and other chronic suppurative lung diseases, endobronchial tuberculosis, chronic cough, lung transplantation and immunosuppression.

An innovation of the book series – born out of the belief that ‘if a picture is worth a thousand words, a video speaks volumes’ – is to include videos that can be seen online. Thus, 48 online original videos covering a large spectrum of airway pathology have been contributed by the authors of the book and greatly enhance the understanding of paediatric bronchoscopy (see online supplementary material, www.karger.com/PRR038_suppl).

Selecting the contributors among the many qualified candidates was a special challenge for the editors. In the end, it was felt that since the book is intended for an international audience, it was best to be written by an international panel
of experts, thus providing multiple points of view and not just the ways of one institution or one country. We are grateful to all the authors for their effort, time and efficiency in this endeavour.

We are also indebted to the publisher, S. Karger AG, Switzerland, for adopting and supporting this project. Special thanks and gratitude go to the Series Editor, Prof. Chris Bolliger, for his ‘tough love’ and open-minded leadership that kept us in line throughout the process. Last but not least, we are grateful to the unsung heroes of every publication in the series, Mr. Thomas Nold and Mr. Stefan Sessler, for their technical advice, and Ms. Linda Haas, for her diligence, efficiency and incredible patience throughout this project.

With a great sigh of relief for reaching the end and satisfaction for the finished product,

Kostas N. Priftis, Michael B. Anthracopoulos, Ernst Eber, Anastassios C. Koumbourlis, Robert E. Wood