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Interventional Bronchoscopy

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When choosing the topic for a particular volume in a scientific book series, the editor is faced with several important questions: should one always choose a ‘hot’ topic, which is of high interest at the moment, or group-related topics in consecutive books, are the volume editors and the potential chapter authors experts in their fields as well as reliable in submitting their work on time, and of course, is the book sellable, or affordable from the buyer’s point of view?

For the first three books as the new series editor of Progress in Respiratory Research, I have chosen somewhat related topics. Volume 28 ‘The Tobacco Epidemic’, was a very timely book treating all aspects of smoking, including the wide range of smoking-related disorders. Among these disorders, lung cancer stands out as one of the major threats. As the tobacco companies concentrate their marketing efforts on developing countries, an unprecedented rise in lung cancer can be expected on a global level. New insights into the treatment of this deadly disease have prompted the inclusion of J.H. Schiller’s book ‘Updates in Advances of Lung Cancer’ as volume 29 of the series. New chemotherapeutic agents, and combined-modality treatments involving chemotherapy, surgery and radiation therapy are discussed in that book among other interesting topics.

Despite these advances, the overall prognosis of lung cancer is still dismal, with the 5-year survival rate remaining at about 13%. Apart from metastases, many lung cancer patients die of local intrathoracic complications, obstruction of the central airways being a frequent cause. Therefore, local tumour control often leads to efficient palliation in lung cancer patients with advanced disease. Apart from the tumour-specific treatment options described in Schiller’s volume, the rapidly emerging field of interventional bronchoscopy adds a new dimension to the therapeutic armamentarium of lung cancer. Choosing the topic of ‘Interventional Bronchoscopy’ was therefore a natural extension to volume 29. Treatment of central airway obstruction is, however, just a small part of this new book which covers all aspects of modern diagnostic and therapeutic interventional bronchoscopy, and true to the vision of this book series to promote ‘progress’ in respiratory research, volume 30 also includes some techniques which are still at an investigational stage. I have undertaken to co-edit the book myself and am very grateful to Prof. Praveen Mathur from Indianapolis for his help in combining all the chapters from authors of both sides of the Atlantic into a state-of-the-art book on bronchoscopy which is of interest to the general reader as well as to the top specialist in the field.

A final comment about the format of this volume. In general, identical format is a top priority of book series. One recognises the series by it, the faithful reader of the series has chosen a certain shelf height where each consecutive volume fits perfectly. So why break all the rules for the current issue? Very simply because of the extensive illustrations, which are necessary for the current topic. We therefore have decided to put function over form for this volume, and make it journal size. We are convinced, the result is a fantastic book.

C.T. Bolliger, Series Editor, Cape Town
Preface

Among the many areas in pulmonary medicine which have been revolutionised by technological advances, bronchoscopy is one of the most obvious examples. Just over 30 years ago, Ikeda introduced the fibre-optic instrument which at the turn of this millennium has practically replaced the rigid instrument for diagnostic procedures in many countries. Parallel to the development of ever finer flexible bronchoscopes and working tools, dramatic advances in imaging techniques of the organs of the chest have become essential for localisation and identification of structures such as lymph nodes, tumours adjacent to bronchial walls, cysts etc., which can be assessed endoscopically to an extent physicians a mere generation ago would not have thought possible. For instance, transbronchial needle aspiration has made sampling of mediastinal lymph nodes a routine endoscopic procedure obviating the need for mediastinoscopies in many patients undergoing pre-operative lung cancer staging.

Apart from this development with the flexible instrument, therapeutic bronchoscopy has come of age, with procedures such as laser resection, electrocautery, argon plasma coagulation, cryotherapy, brachytherapy, photodynamic therapy and stenting, which have all become recognised treatment modalities. For many of the therapeutic procedures, the rigid bronchoscope has witnessed a revival in recent years, as many leading bronchoscopists prefer to use it in circumstances where perfect airway control is mandatory, often when bleeding is a potential threat. Quite often, the rigid and the flexible instruments are used in combination.

Understandingly, a new term to encompass all these techniques was due to be coined: ‘interventional bronchoscopy’. There is emerging consensus that interventional bronchoscopy includes both diagnostic as well as therapeutic procedures which go beyond simple bronchoscopy. The term interventional pulmonology, on the other hand, usually includes interventional bronchoscopy as well as thoracoscopy.

It was the purpose of this book to bring together most of the currently leading interventional bronchoscopists in the world to contribute their knowledge for a state-of-the-art book on interventional bronchoscopy. Contrary to some other books which have appeared recently, this volume, which is volume 30 in the series Progress in Respiratory Research, has the role to serve as a textbook on the
one hand, but has to provide the reader with the latest development in the field as well. Thus, the book starts with a historical introduction to bronchoscopy, then deals with the classic chapters on bronchoscopy covering all the topics mentioned above. True to the ‘progress’ vision of the series some chapters cover emerging areas, such as fluorescence bronchoscopy for the detection of early lung cancer, endobronchial ultrasound, optical diagnostic and therapeutic technologies, virtual bronchoscopy and endobronchial gene therapy. These chapters herald the future of bronchoscopy.

Another two chapters we thought very important for a complete book cover the role of bronchoscopy as an integral part of a patient’s management. In the treatment of lung cancer, for instance, endoscopic modalities are often discussed in the bronchology literature, whereas non-endoscopic options appear in the oncological literature, but the relative place and timing of both during the course of the disease is rarely found. The chapters on ‘functional evaluation before and after interventional bronchoscopy’ and ‘multi-modality treatment of advanced pulmonary malignancies’ are attempts to make up for this gap in the literature. All in all, the book really covers bronchoscopy from Killian, a good century ago, up to the latest fascinating concept of endoscopic gene therapy for pulmonary neoplasms.

We, the European and the North American editor of this book, were fortunate in basically getting the best people from all over the world to write for us. Many of these authors are regarded as the ultimate authorities in their field of expertise, and the result is this outstanding book. There are some minor overlaps in some topics, i.e. in the two chapters describing the different systems used for fluorescence bronchoscopy which have been accepted deliberately, because some of the statements made are based on preliminary experiences and brand new results. Many of the chapters have been written in the first 6 months of 1999, which will make this book relevant for some years into the new millennium!

‘Interventional Bronchoscopy’ will appeal to a broad readership, some who look for the latest textbook will have their questions answered, as well as the experienced bronchoscopist, who would like to get the latest information on the cutting edge of research. The publishing house, S. Karger AG, Switzerland, has yet again brought out a book of outstanding quality of print, especially with regard to the many important figures which makes reading this volume an intellectual as well as a visual pleasure.

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