

BOOK REVIEWS

Lung Development and Regeneration: Lung Biology in Health and Disease, Vol. 190.

Edited by D.J. Massaro, G. DeCarlo Massaro and P. Chambon

Published by Marcel Dekker, New York, 2004.

Pages: 593. ISBN: 0-8247-5439-5

Although its title is not fully indicative in this respect, this book focuses on two chronic diseases with disordered lung alveolar structure; chronic obstructive pulmonary disease/emphysema (COPD), which results from structure destruction, and bronchopulmonary dysplasia (BPD) of the premature neonate, which results from impaired structure development. The objective of this book is to present supportive experimental and technological means aimed at achieving remediation of both diseases. The rationale for bringing together various aspects of these diseases with normal lung development is based on the recent paradigm that regeneration/repair processes may recapitulate, at least to some extent, those mechanisms involved during normal morphogenesis.

Relevance of the topic and timeliness of the publication appear clearly, ensuing from the fact that the old notion of the immutability of alveolar structure recently gave way to the new concept of alveolar plasticity. Contents and quotations were up to date at the time of publication, but the topic is evolving fast. The plan of the book is somewhat puzzling, the order of chapters and the presence of some chapters in a same section appearing sometimes questionable.

A first section gathers updated knowledge about both diseases, together with pathophysiological bases for their treatment. The second section presents technological and theoretical foundations for studies aimed at remedial therapy. A short third section is devoted to comparative lung structure and mechanics; an excellent chapter describes the establishment of mammalian lung structures, but the contribution of the chapter on nonmammalian vertebrate lungs does not appear clearly. A fourth section reduced to a single chapter is entitled "branching morphogenesis", although it largely encompasses this theme since all lung developmental aspects

through alveolarisation are considered. The last section named "the gas-exchange region" relates to various cell and molecular aspects of COPD and of alveolar development or regeneration. However, there is some redundancy between the contents of several chapters.

All authors and editors can be regarded as experts in their respective fields. The full topic seems adequately covered with no major areas missing, but quotations may sometimes appear selective, with no reference to important findings or research groups involved in the field. A well-designed subject index is available, but an author index, which would have been useful, is lacking. Illustrations and tables are generally instructive and of good quality.

By contrast, summaries and/or concluding remarks are sometimes insufficient, and key points are often not easily identified. There exist some inaccuracies and minor errors, but these do not extensively affect the overall quality of the work. The major strength of this book is to gather in the same volume, literature that is generally found in different reviews. Its weakness resides in its heterogeneity and the absence of leading strand across the content.

The book will be useful to researchers in the basic science of lung development, and also to clinician-researchers interested in better understanding recent work on mechanisms potentially implicated in bronchopulmonary dysplasia and chronic obstructive pulmonary disease, and who are involved in the search of new therapeutic strategies. However, it may not be useful for daily clinical practice in these domains.

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Pleural Disease—Lung Biology in Health and Disease, Volume 186.

Edited by D. Bours

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This is the second volume in the series 'Lung Biology in Health and Disease' on the pleura after 'The Pleura in Health and Disease', which was edited as Volume 30 in 1985 by Jacques Chrétien, Jean Bignon and Albert Hirsch. So it may be of interest to compare the two volumes and look for differing aspects. Claude Lenfant was editor of both volumes, and five authors of the 1985 volume contributed again to the 2004 volume, which has 162 extra pages. Eighty-two authors are completely new. Also new is the chapter on the history of pleural disease. Overall, the new book concentrates less on basics and is much more clinically oriented. There are special chapters on imaging and ultrasound. Thoracoscopy is today called 'medical thoracoscopy', and the chapter on 'Open pleural biopsy' is replaced by the chapter 'Diagnostic video-assisted thoracoscopic surgery' and 'Therapeutic use of thoracoscopy'. Several other new chapters are 'Interventional radiology', 'Pleural lavage as a diagnostic and research tool', 'Animals models in pleural investigation', 'Pharmacokinetics and pharmacodynamics in pleural fluid', 'The pleural space in organ transplantation', 'Pleurodesis', 'Pleuroperitoneal shunts'; as well as 'Discrimination

between transudative and exudative pleural effusions' and 'Differentiating between benign and malignant pleural effusions'.

Special chapters are devoted to the important clinical entities such as immunological diseases, blood diseases, HIV and tuberculous pleuritis. As well as pleural effusions in children, in cardiac disease, in pregnancy and gynaecological diseases, in the intensive care unit, in gastrointestinal tract diseases, in pulmonary embolism, in fungal, nocardial, and actinomycotic infection, in parasitic infection, and to iatrogenic and rare pleural effusions. Further chapters concentrate on pneumothorax, haemothorax and chylothorax. At the end of each chapter, the latest references are given.

This book is written by internationally well-known contributors and is of interest to clinicians and basic researchers or pharmacologists. It gives a comprehensive overview of the present knowledge on pleural diseases and should be included in every medical library.

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