BOOK REVIEW

Control of Breathing in Health and Disease

Edited by M.D. Altos and Y. Kawakami
Published by Marcel Decker, New York, USA
Pages: 755. Price: £136.55, 201 euros. ISBN: 0-8247-9854-6

This is a comprehensive book on a topic that is not as popular as it once was in physiology during the pre-molecular and pre-genetic era. Control of breathing is often a problem in pulmonology, intensive care units and anaesthesiology. Medical specialists working in these fields should be knowledgeable about these problems, and should have easy access to a reference book in order to read up on them. This book would be quite suitable for such purposes.

The range of chapters includes: Physiologic fundamentals; Neurophysiology of rhythm generation; Motor output; Neurotransmitters; Chemical control of breathing; and Behaviour control of breathing in humans and in experimental animals. The book goes on to discuss physiological phenomena, such as dyspnoea, and exercise and upper airway reflexes. The Pathophysiology section contains information on periodic breathing and clinical assessment of the respiratory control system. Both children and the elderly are discussed in the clinical section, as well as in the following sections: Sleep; COPD; Interstitial lung disease; Neuromuscular disease; Congestive heart failure; metabolic disorders hyperventilation syndrome; and Lung transplantation.

The connections between basic physiology and its clinical application are extremely well made throughout this comprehensive book. The emphasis on basic mechanisms and comparative physiology is somewhat strong. However, this certainly helps readers gain insight into clinical problems. Both the figures and tables are clearly presented, providing solid information. However, some areas are not covered, such as altitude, diving reflexes and thermoregulatory aspects of control of breathing. Pharmacological treatment of respiratory failure and respiratory muscle training is also given little attention.

The authors are all well known and established authorities within their fields. The scientific level of this book is, therefore, very high, in accordance with the other volumes in the series 'Lung Biology in Health and Disease'. It first appeared on the market in 1999, with the preparation of the book and gathering of all the manuscripts taking several years. Thus, the book is not very up to date, which is also reflected in the references sections of each of the chapters; most references were published before the mid-1990s. However, I am not aware of an equally comprehensive book on control of breathing, which is more recent.

It would be more than appropriate for every chest clinic, anaesthesiology dept or intensive care dept to have this book in its library. Furthermore, this book can be recommended for interested clinicians and for investigators (physiologists, pharmacologists, control engineers) in the field of control of breathing.

The strength of the book is its comprehensiveness and the group of experts who have contributed. Its weakness is the age of the publication.

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