



图书基本信息

- 书名:<<呼吸系统>>
- 13位ISBN编号:9787565901171
- 10位ISBN编号:7565901172
- 出版时间:2011-4
- 出版时间:北京大学医学
- 作者:(英)戴维斯//穆瑞斯
- 页数:171

版权说明:本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:http://www.tushu007.com



内容概要

"以器官系统为中心"的医学教学模式是国际医学教育的趋势。

本系列书是世界著名医药卫生出版集团爱思唯尔公司出版的一套 " 以器官系统为中心 " 的医学基础课 程教材。

该套教材第1版出版后受到世界各地许多医学院校的欢迎,并被多家进行"以器官系统为中心"教学 的医学院校选定为教材。

第2版根据第1版出版后教师和学生的反馈意见,结合医学知识的更新进行了全新修订。

在编写内容上,该系列教材强调基础与临床的整合。

每一章节都是围绕着一个临床病例展开,通过对病人问题的呈现以及解决过程引出对相关知识的探究,从而使与器官系统结构、功能以及疾病相关的重要的基础医学知识得到了完善的整合。

在版式安排上,图框中的病例资料与正文中的医学知识完美匹配,一步一步地激起读者的求知欲望。 本册为《呼吸系统》。





作者简介

作者:(英国)戴维斯(Andrew Davies)(英国)穆瑞斯(Carl Moores)





书籍目录

1 INTRODUCTION Introduction What is respiration? The need for respiration Diffusion in respiration and the circulation Timing in the circulation and respiration Basic science of respiration Drugs 2 STRUCTURE OF THE RESPIRATORY SYSTEM, RELATED TO **FUNCTION** Introduction The upper airways The intrathoracic airways **Blood** vessels Pulmonary hypertension The lymphatics The nerves Gross structure of the respiratory system Pleurisy The diaphragm and chest wall How breathing is brought about Embryology Air-conditioning Metabolic activity Metabolism of circulating biologically active substances Non-respiratory functions **3 ELASTIC PROPERTIES OF THE RESPIRATORY SYSTEM** Introduction Intrapleural pressure (Ppl) Static lung compliance (CL) The effect of disease The physical basis of lung compliance **4 AIRFLOW IN THE RESPIRATORY SYSTEM** Introduction How airflow is brought about The nature of airflow The major determinant of flow - radius Airways resistance and obstructive pulmonary disease The clinical situation Sites of airways resistance Asthma and airways smooth muscle Bronchomotor tone Pharmacological treatment of asthma Clinical definitions





Bronchitis and mucus Emphysema and radial traction Intrapleural pressure and cough Clinical tests for changes in resistance Work of breathing 5 VENTILATION OF THE RESPIRATORY SYSTEM: THE IMPORTANCE OF ITS LACK OF UNIFORMITY IN DISEASE Introduction Spirometric abnormalities in disease Uneven distribution Dead space. Alveolar dead space in disease The Bohr equation Factors affecting physiological dead space Alveolar ventilation and respiratory exchange The alveolar gas equation Distribution of inspired gas Other factors influencing distribution 6 GAS EXCHANGE BETWEEN AIR AND BLOOD: DIFFUSION The path from air to tissue Lung disease and diffusion Fick's Law of Diffusion Measuring transfer factor Treating diffusion difficulties Carbon dioxide and other gases 7 THE PULMONARY CIRCULATION: BRINGING BLOOD AND GAS TOGETHER The functions of the pulmonary circulation The anatomy of the pulmonary circulation Matching ventilation and perfusion Distribution of blood flow through the lungs Regional differences in ventilation in the lungs Ventilation/perfusion matching and its effect on blood O and CO content Shunt 8 CARRIAGE OF GASES BY THE BLOOD AND ACID/BASE BALANCE Introduction Oxygen transport Dissolved oxygen: do we really need Hb and why keep it in red cells? Carbon dioxide transport Acid-base balance 9 CHEMICAL CONTROL OF BREATHING Introduction Oxygen lack Carbon dioxide excess NERVOUS CONTROL OF BREATHING 10





Introduction The rhythm generator Pattern of breathing in COPD The respiratory 'centres' The medullary groups Conscious control of breathing Respiratory muscle innervation Neuromuscular disorders Vagal reflexes Dyspnoea Other reflexes 11 LUNG FUNCTION TESTS: MEASURING DISABILITY Introduction Spirometry Flow measurements Plethysmography Lung mechanics Transfer factor (diffusing capacity) Blood gases Gas washouts Exercise testing Challenge tests Appendix: some basic science Glossary Index



章节摘录

版权页:插图: Above the larynx, the airway is held open by the actions of airway-dilating muscles, including genioglossus and palat-opharyngeus. Were it not for the actions of these muscles, theupper airway would collapse, particularly in the supine posi-tion. During sleep, the tone in skeletal muscles throughoutthe body is reduced and this applies equally to the muscleswhich keep the upper airways patent. It is therefore normalfor the upper airway to become narrowed during sleep. In patients with OSA, the airway narrowing is morepronounced than normal and leads to periods of airwayobstruction. There are a number of reasons why this hap-pens, but obesity is the most important. It is thought that inobese patients, the pressure exerted by the fat in the necktends to cause the airway to collapse. When the tone in thegenioglossus and palatopharyngeus is reduced, as duringsleep, airway obstruction may result. The airway may remain obstructed for only a few seconds,or it may be well over a minute before the patient takeshis next breath. During this time, the patient may becomehypoxic and will begin to make vigorous efforts to try andbreathe against the obstructed airway. Furthermore, he willbecome increasingly aroused from his sleep. Eventually, heregains the tone in his airway-dilating muscles and the airwayobstruction is relieved. (Patients do not usually waken.) After the obstruction has been relieved, ventilation resumes and thepatient's sleep deepens. This leads to a reduced tone in theairway-dilating muscles and the cycle starts to repeat itself. Although obesity is probably the most important fac-tor leading to OSA, there are other predisPos !

ng factors. These include anatomical variations predisposing to airwaynarrowing, such as enlarged tonsils, airway tumours and abnormalities of the mandible. Sedative drugs, includingalcohol, may also predispose to sleep apnoea, probably byaffecting sleep patterns and by reducing muscle tone. Asmall number of cases of OSA may be explained by abnor-malities of neuromuscular function.



编辑推荐

《呼吸系统(第2版)》: The Systems of the Body series has established itself as a valuable resource for allmedical and other health science students following system-based courses. In thissecond edition all the volumes have been updated to take into account feedback fromreaders of the first edition. Each volume continues to present the core knowledge of basic science and clinical conditions that medical students need, offering an integrated view of the system unavailable from standard textbooks. An expanded selection ofself-assessment material is available from www.studentconsult.com/gopaperlessThe Respiratory System explains basic science in the context of clinical casehistories, giving the reader an integrated understanding of the system and itsmajor diseases. Introduction

Structure of the respiratory system, related to function, Elastic properties of the respiratory system, Airflow in the respiratory system, Ventilation of the respiratory system: the importance of its lack of uniformity in disease
Gas exchange between air and blood: diffusion, The pulmonary circulation: bringing blood and gas together

Gas exchange between air and blood: diffusion, The pulmonary circulation: bringing blood and gas together
Carriage of gases by the blood and acid/base balance, Chemical control of breathing, Nervous control of breathing, Lung function tests: measuring disability.





版权说明

本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:http://www.tushu007.com