Aging And Heart Failure Mechanisms And Management

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It is your certainly own grow old to conduct yourself reviewing habit. among guides you could enjoy now is **Aging And Heart Failure Mechanisms And Management** below.

Cardiomyocytes in Health and Disease - Chandrasekharan C. Kartha 2021-10-15
This book is a treatise on cardiomyocytes, the most important cell for the contractile function of the heart. There has been significant progress in our understanding of the function-related structure, developmental processes and their determinants, mechanisms of cell cycle regulation, post-natal growth, energy metabolism, and reversible and irreversible response of cardiomyocytes to diverse forms of physiological stress and injury. There is also more clarity on the alterations in the biological mechanisms in cardiomyocytes that lead to pathological states and the changes in the cells that occur secondary to disease conditions. Thanks to these advances in knowledge, there have been great gains in attempts to identify disease biomarkers and therapeutic targets for better management of patients with heart diseases. Possibilities to induce regeneration or proliferation of cardiomyocytes and thus repair and or regenerate the damaged heart are also on the horizon.

Aging and Heart Failure - Bodh I. Jugdutt 2014-02-19
This book synthesizes the major research advances in molecular, biochemical and translational aspects of aging and heart failure over the last four decades and addresses future directions in management and drug discovery. It presents clinical issues and molecular mechanisms related to heart failure, including the changing demographics in the aging population with heart failure; hypertension and prevention of diastolic heart failure in the aging population; polypharmacy and adverse drug reactions in the aging population with heart failure; changes in the heart that accompany advancing age from humans to molecules; aging-associated alterations in myocardial inflammation and fibrosis and aging-related changes in mitochondrial function and implications for heart failure therapy. The book succinctly summarizes the large volume of data on these key topics and highlights novel pathways that need to be explored. Featuring contributions from leading clinician-scientists, Aging and Heart Failure: Mechanisms and Management is an authoritative resource on the major clinical issues in heart failure therapy in the elderly for cardiologists, gerontologists and internists.

Promoting Cardiovascular Health in the Developing World - Institute of Medicine 2010-07-29
Cardiovascular disease (CVD), once thought to be confined primarily to industrialized nations, has emerged as a major health threat in developing countries. Cardiovascular disease now accounts for nearly 30 percent of deaths in low and middle income countries each year, and is accompanied by significant economic repercussions. Yet most governments, global health institutions, and development agencies have largely overlooked CVD as they have invested in health in developing countries. Recognizing the gap between the compelling evidence of the global CVD burden and the investment needed to prevent and control CVD,

the National Heart, Lung, and Blood Institute (NHLBI) turned to the IOM for advice on how to catalyze change. In this report, the IOM recommends that the NHLBI, development agencies, nongovernmental organizations, and governments work toward two essential goals: creating environments that promote heart healthy lifestyle choices and help reduce the risk of chronic diseases, and building public health infrastructure and health systems with the capacity to implement programs that will effectively detect and reduce risk and manage CVD. To meet these goals, the IOM recommends several steps, including improving cooperation and collaboration; implementing effective and feasible strategies; and informing efforts through research and health surveillance. Without better efforts to promote cardiovascular health, global health as a whole will be undermined.

Aging and Heart Failure - Bodh I. Jugdutt 2014-02-21

This book synthesizes the major research advances in molecular, biochemical and translational aspects of aging and heart failure over the last four decades and addresses future directions in management and drug discovery. It presents clinical issues and molecular mechanisms related to heart failure, including the changing demographics in the aging population with heart failure; hypertension and prevention of diastolic heart failure in the aging population; polypharmacy and adverse drug reactions in the aging population with heart failure; changes in the heart that accompany advancing age from humans to molecules; aging-associated alterations in myocardial inflammation and fibrosis and aging-related changes in mitochondrial function and implications for heart failure therapy. The book succinctly summarizes the large volume of data on these key topics and highlights novel pathways that need to be explored. Featuring contributions from leading clinician-scientists, Aging and Heart Failure: Mechanisms and Management is an authoritative resource on the major clinical issues in heart failure therapy in the elderly for cardiologists, gerontologists and internists.

Heart Failure: A Companion to Braunwald's Heart Disease E-Book - G. Michael Felker 2019-02-06

Up-to-date, authoritative and comprehensive, Heart Failure, 4th Edition, provides the clinically relevant information you need to effectively manage and treat patients with this complex cardiovascular problem. This fully revised companion to Braunwald’s Heart Disease helps you make the most of new drug therapies such as angiotensin receptor neprilysin inhibitors (ARNIs), recently improved implantable devices, and innovative patient management strategies. Led by internationally recognized heart failure experts Dr. G. Michael Felker and Dr. Douglas Mann, this outstanding reference gives health care providers the knowledge to improve clinical outcomes in heart failure patients. Focuses on a clinical approach to treating heart failure, resulting from a broad variety of cardiovascular problems. Covers the most recent guidelines and protocols, including significant new updates to ACC, AHA, and HFSA guidelines. Covers key topics such as biomarkers and precision medicine in heart failure and new data on angiotensin receptor neprilysin inhibitors (ARNIs). Contains four new chapters: Natriuretic Peptides in Heart Failure; Amyloidosis as a Cause of Heart Failure; HIV and Heart Failure; and Neuromodulation in Heart Failure. Covers the pathophysiological basis for the development and progression of heart failure. Serves as a definitive resource to prepare for the ABIM’s Heart Failure board exam. 2016 British Medical Association Award: First Prize, Cardiology (3rd Edition).

Pathophysiology of Heart Failure - Naranjan S. Dhalla 2012-12-06

Pathophysiology of Heart Failure brings together leading basic scientists and clinicians, presenting new approaches to this complex problem, involving cardiomyopathic processes and ischemia perfusion injury. The result is a synthesis of state-of-the-art information on molecular biology, cellular physiology and structure-function relationships in the cardiovascular system. The role which excess intracellular calcium plays in the genesis of cardiac dysfunction is described as a fundamental mechanism underlying heart failure; one which may lead to improved prevention and treatment. Audience: Clinical and experimental cardiologists will find the book

a helpful source of ideas and inspiration.

Diastology - Allan L. Klein 2020-11-15

Accounting for more than 40% of all heart failure problems, diastolic heart failure is a complex and often difficult diagnosis with rapidly evolving diagnostic management protocols. Diastology: Clinical Approach to Heart Failure with Preserved Ejection Fraction, 2nd Edition, brings you up to date and equips you to successfully diagnose and manage even the most challenging incidences of diastolic heart failure and their comorbidities. It incorporates the latest guidelines for the diagnostic evaluation of the patient with suspected or known diastolic dysfunction, provides a comprehensive review of clinical conditions associated with heart failure with preserved ejection fraction, and describes the complementary role of imaging modalities and novel therapeutic approaches. Keeps you current with recent extensive changes in the understanding of the mechanisms of diastolic heart failure with preserved ejection fraction (HFpEF) that have resulted in dramatic changes in treatment guidelines. Covers the latest molecular, genetic, and cellular mechanisms behind diastolic heart failure as a basis for the latest clinical approaches, diagnosis, and treatment of common and uncommon pathological conditions such as hypertensive heart disease, cardiomyopathies, arterial and valvular diseases, pericardial diseases, congenital heart disease, diabetes mellitus, and metabolic syndrome. Features 50 video cases, new key summary points, new multiple-choice review questions, and six new chapters: Evaluation of Diastolic Function by Radionuclide Techniques; Diastology Stress Test; ASE/EACVI Diastolic Guidelines; Valve Disease; Perioperative Assessment of Diastolic Dysfunction; and Pulmonary Hypertension. Reviews new techniques and indices for assessing diastolic function, such as 3D echo, strain rate imaging, late gadolinium enhancement and T1-mapping by CMR, and novel nuclear scintigraphic methods - as well as the traditional indices of LV filling, LA function, and tissue Doppler indices. Covers emerging topics such as the role of neurohormones, global and regional systolic function of the left ventricle, chronotopic incompetence and pacing, aging, perioperative assessment, and more.

Presents information in a quick-retrieval format, covering Epidemiology, Pathophysiology, Diagnostic Evaluation, Differential Diagnosis, Treatment, and Future Directions. Helps you learn efficiently and prepare for specialty board examination with key summaries and multiple-choice questions and answers for each chapter. Enhanced eBook version included with purchase. Your enhanced eBook allows you to access all of the text, figures, and references from the book on a variety of devices.

Fast Facts: Heart Failure - D. Korczyk 2022-03-16

A better understanding of the mechanisms and pathophysiological pathways of heart failure (HF), improved management of associated comorbidities, and advances in identifying genetic cardiac disease have led to a near-revolution in the management of patients in terms of pharmacological treatments, surgery and devices. These developments have transformed outcomes and HF-associated mortality, and gene therapies further promise a brighter future for patients who experience the debilitating effects of HF. This new edition of 'Fast Facts: Heart Failure' starts with the definitions of HF (different types of HF require different treatments), then provides the latest thinking on mechanisms and clinical stages, underlying causes and the assessment and management of comorbidities. This is followed by simple diagnostic criteria and a comprehensive overview of investigations. The management chapters focus on the importance of self-care education and healthy lifestyle choices, together with the latest recommendations for pharmacological treatment, device therapy and cardiac surgery from international guidelines. The final chapter on developments is an indication of the ongoing innovation in this rapidly moving field. Table of Contents: • Definitions, classification and epidemiology • Pathophysiology and clinical stages • Causes • Comorbidities • Diagnosis • General management and lifestyle considerations • Pharmacological treatment • Non-pharmacological management • Advanced HF therapies • Prognosis • Developments and future directions

Occupational Therapy with Older Adults - E-Book - Helene Lohman, Ma Otd Otr/L

2023-04-12
Gain the focused foundation needed to successfully work with older adults. Occupational Therapy with Older Adults: Strategies for the OTA, 5th Edition is the only comprehensive book on occupational therapy with older adults designed specifically for the occupational therapy assistant. It provides in-depth coverage of each aspect of geriatric practice -- from wellness and prevention to managing chronic conditions. Expert authors Helene Lohman, Amy Shaffer, and Patricia Watford offer an unmatched discussion of diverse populations and the latest on geriatric policies and procedures in this fast-growing area of practice. UNIQUE! Focused coverage emphasizes the importance of the role of an OTA in providing care for older adults. UNIQUE! Coverage of diverse populations, including cultural and gender diversity, prepares OTAs to work with older adults using cultural sensitivity. UNIQUE! Critical topic discussions examine concepts such as telehealth, wellness, and health literacy. Interdisciplinary approach highlights the importance of collaboration between the OT and the OTA, specifically demonstrating how an OTA should work with an OT in caring for older adults. Case studies at the end of chapters help to prepare for situations encountered in practice. NEW! An ebook version is included with print purchase and allows access to all the text, figures, and references, with the ability to search, customize content, make notes and highlights, and have content read aloud. NEW! Evidence Nuggets sections highlight the latest research to inform practice. NEW! Tech Talk feature in many chapters examines the latest technology resources. Revised content throughout provides the most current information needed to be an effective practitioner. Updated references ensure the content is current and applicable for today's practice.

Diastology E-Book - Allan L. Klein 2008-04-30
This reference thoroughly equips you to successfully diagnose and manage even the most complex incidences of diastolic heart failure and their comorbidities. It examines the basic mechanisms of this condition through discussions of both cellular and anatomic causes; guides you through non-invasive techniques for diagnosis, including echocardiography, cardiac CT, and MRI; and provides expert advice on pharmacologic management. Covers the basic mechanisms of diastolic heart problems from both cellular and anatomic perspectives. Chapters covering modalities helpful in assessment of diastolic function such as: echocardiography, cardiac MRI, radionuclide ventriculography, and invasive hemodynamic measurements. Features in-depth assessments of all diagnostic methods for diastolic heart failure, including rationales for their use. Examines contributing conditions that play a role in diastolic heart failure and offers guidance on their management. Offers pharmacologic strategies for multiple problem management.

Stress and Heart Disease - R. E. Beamish 1985-03-31
It has been known or suspected for centuries that there is an association between mind and emotions and the occurrence of heart disease apd sudden death. During the past fifty years this relationship has become identified with the concept of Stress, a notion developed and popularized by Hans Selye. In recent years there has been an upward surge of interest in stress by scientists in several disciplines and by the general public. Although, books, journal articles, seminars and media programs devoted to stress now abound, the definition, manifestations, mechanisms, and management of stress remain uncertain and controversial. In an attempt to clarify the situation an International Symposium on Stress and Heart Disease was held in Winnipeg, Canada, June 26-29, 1984, and the proceedings form the basis of this book and its companion volume "Patho genesis of Stress-Induced Heart Disease". Although most species which have ever existed are now extinct through countless millenia, the human species has successfully adapted to changing conditions ("stressors") such as ice ages, predators and parasites, wars, famine and plague, and now it is coping with rapidly changing social, economic and political circumstances. Such adaptation occurs at all levels of life- at the molecular level within the cell, at the level of the whole cell, in the groups of cells as organs, in the entire organism or individual, and in some cases, in the society in which the individual lives.

Co-morbidities in Heart Failure, An Issue of Heart Failure Clinics, E-Book - Faiez Zannad 2014-03-30

This issue of Heart Failure Clinics examines co-morbidities in patients with heart failure. Topics include hypertension, diabetes, pulmonary disorders, cardiorenal syndrome, anemia, depression, atrial fibrillation, obesity and cardiac cachexia, peripheral vascular disease, rheumatologic disorders, co-morbidities and polypharmacy, coronary artery disease, and clinical trials.

Congestive Heart Failure - Jeffrey D. Hosenpud 2000

Now thoroughly revise and updated -- and with many renowned new contributors -- the Second Edition of this highly acclaimed text is the most complete, current, and authoritative reference on congestive heart failure. The book is written by the leaders in the field and covers every aspect of congestive heart failure, from molecular and cellular biology to pathophysiology, diagnosis, and treatment. This edition reflects numerous major developments in the study of the pathogenesis of heart failure and in therapy. The timely coverage also includes cost-effectiveness issues in diagnosis and treatment, as well as a greater emphasis on clinical epidemiology. Nine entirely new chapters focus on key areas such as progression from left ventricular hypertrophy to heart failure; remodeling of the heart after myocardial infarction; cardia interstitium and its role in the pathogenesis of heart failure; cytokine activity; management of atrial arrhythmias; and surgical treatment of heart failure.

Orthostatic Hypotension in Older Adults - Ahmet Turan Isik 2020-12-21

This book provides a comprehensive and practical guide to orthostatic hypotension (OH) for doctors and nurses involved in the care of older adults, together with a state-of-the-art update on OH, covering its epidemiology, pathophysiology, assessment, diagnosis, causes, prevention, management, and relevance for geriatric practice. In addition, it addresses mechanisms of orthostatic tolerance and other orthostasis related conditions, as well as drugs, comorbidities and geriatric syndromes related to OH. The homeostatic ability to maintain blood pressure while standing requires an adequate blood volume and the integrity of the nervous system, heart, blood vessels and muscle pump. However, in older adults, some age-related factors can contribute to the development of OH. For example, decreased baroreflex sensitivity, α-1-adrenergic vasoconstrictor response to sympathetic stimuli, parasympathetic activity, renal salt and water conservation, increased vascular stiffness and decreased ventricular diastolic filling, as well as concentrated capacities of the kidney may be associated with changes in postural blood pressure. It has also been shown that OH is associated with falls, cardiac events, heart failure, stroke, reduced quality of life, and increased risk of overall mortality in these patients. “Orthostatic Hypotension in Older Adults” will be of considerable interest to all professionals working in the fields of geriatrics, geriatric psychiatry, neurology, internal medicine, cardiology, and emergency medicine, or working with older people in hospitals or in their community.

Atrial Fibrillation - Rodney H. Falk 1992

Provides guidance on the management of atrial fibrillation, the commonest sustained disturbance of cardiac rhythm faced by physicians. The text discusses all aspects of this arrhythmia, from basic cellular electrophysiology, pathology and epidemiology to complex clinical decisions.

Thyroid and Heart Failure - Giorgio Iervasi 2009-08-29

Both thyroid dysfunction and heart failure show a high prevalence in the adult population. Frequently, in clinical practice, a multidisciplinary approach is useful to optimize the management of patients with these conditions. Although there is no doubt regarding the close link between cardiovascular pathophysiology and thyroid homeostasis, our understanding of this association is far from being exhaustive. Thyroid hormone regulates the expression of cardiac-specific functional contractile and structural proteins and plays a pivotal role in modulating both diastolic and systolic function as well as peripheral vascular resistance. The close relationship between thyroid and heart dysfunction is strongly supported by recent evidence demonstrating that an altered thyroid profile is a negative

prognostic predictor in patients with heart failure. The treatment of chronic heart failure, especially in advanced stages of the disease, continues to be an open and challenging field. The potential of novel thyroid hormone therapies that address the molecular biology of thyroid dysfunction and heart failure thus represents an attractive area of multidisciplinary scientific interest. This book is a readable, integrated, and highly up to date presentation of the clinical, pathophysiological, and basic science aspects of thyroid–heart failure interactions. It addresses a complex subject in an approach that targets a large audience of readers.

Characterization and Clinical Management of Dilated Cardiomyopathy - Marco Merlo 2021-01-12

Dilated cardiomyopathy (DCM) is a particular phenotype of non-ischemic systolic heart failure, frequently recognizing a genetic background and affecting relatively young patients with few comorbidities. Nowadays, long-term survival of DCM patients has been markedly improved due to an early diagnosis and uninterrupted and tailored follow-up under constant optimal medical and non-pharmacological evidence-based treatments. Nevertheless, DCM is still one of the most common causes of heart transplantation in the western world. Clinical management requires an integrated and systematic use of diagnostic tools and a deeper investigation of the basic mechanisms underlying the disease. However, several emerging issues remain debated. Specifically, the genotype–phenotype correlation, the role of advanced imaging techniques and genetic testing, the lack of appropriate risk stratification models, the need for a multiparametric and multidisciplinary approach for device implantation, and a continuous reclassification of the disease during follow-up remain challenging issues in clinical practice. Therefore, the aim of this Special Issue is to shed the light on the most recent advancements in characterization and clinical management of DCM in order to unveil the conundrum of this particular disease.

Heart Failure in the Elderly - Wilbert S. Aronow 2006

With the aging of the population, heart failure is fast becoming an epidemic the medical community needs to deal with. In special patient populations, such as the elderly, the question of treatment cannot be a simple one. All of the authors who have contributed to this book are nationally and internationally recognized experts in cardiovascular disease as it appears in the elderly. They are dedicated to improving care for older persons and their many years of personal experience enable them to summarize and synthesize their respective topics with unique insights that are highly beneficial to the reader. The epidemiology, pathophysiology, prognosis, clinical manifestations, diagnostic assessment, etiology, and role of echocardiography in the diagnostic assessment and etiology of heart failure are discussed. The treatment of heart failure in the elderly through the use of diuretics, inotropic drugs, neurohormonal antagonists, antiarrhythmic drugs, angioplasty, surgical therapy, cardiac resynchoronization therapy, exercise therapy, and use of implantable cardioverter-defibrillators are presented.

Fuster and Hurst's The Heart, 15th Edition - Valentin Fuster 2022-04-29

The landmark text that belongs in the hands of every cardiologist—fully updated and reorganized to make it more patient-centric than ever World-famous for its authority and clinical relevance, Fuster and Hurst’s The Heart is cardiology’s longest continuously published reference book. Written to meet the ever-changing needs of cardiologists, fellows, and interns, this trusted classic offers a solid foundation in cardiovascular medicine and complete coverage of all major cardiovascular topics. This fifteenth edition presents a greater focus on the practicalities of patient care. Additionally, the content is ordered in a more methodical pattern, from mechanism to management. Reflecting the latest technical, therapeutic, and clinical advances, Fuster and Hurst’s The Heart provides invaluable concise summaries of major new trials and guidelines. Authoritative Coverage and Unmatched Utility: Central Illustrations New section on cardiovascular critical care New chapter "Cardiovascular Disease and COVID-19" Chapter summaries ACC/AHA/ESC guidelines in all chapters 1,200+ photos and illustrations Sections Include: Risk Factors for

Cardiovascular Disease Atherosclerosis and Coronary Heart Disease Diseases of the Great Vessels and Peripheral Vessels Valvular Heart Disease Rhythm and Conduction Abnormalities Heart Failure Diseases of the Pericardium Cardiopulmonary Disease Critical Cardiovascular Care Adult Congenital Heart Disease Special Populations and Topics in Cardiovascular Disease

Sleep and the Heart, An Issue of Sleep Medicine Clinics, E-Book - Rami N. Khayat 2017-08-24

This issue of Sleep Medicine Clinics is edited by Dr. Rami Khayat and focuses on Sleep and the Heart. Article topics include: Mechanisms of SDB and respiratory control instability in heart failure; Rehabilitation of cardiovascular disorders and sleep apnea; Device therapy for SDB in patients with CVD and heart failure; Non-mask based therapies for CSA in patients with heart failure; Movement disorders and non-respiratory sleep disorders in patients with CVD; A practical approach to the identification and management of SDB in heart failure patients.

Heart Failure Mechanisms and Management - Basil S. Lewis 2012-12-06

Following remarkable advances in medical care. the past decade has witnessed a significant improvement in the survival of patients with many different forms of heart disease. In the majority ofcases. however. the advances have been pa lIiative and not curative. The resu It has been the prod uction of an ever-increasing population of patients with heart disease. many of whom suffer from myocardial dysfunction and latent or overt heart failure. Heart failure is now a major cause of morbidity and mortality in cardiac patients. This book aims to combine in a single volume data relating to both pathophysiological mechanisms and the clinical management of the patient with heart failure. It includes chapters dealing with molecular. biochemical. and pathophysiological aspects of heart failure. ven tricular function and its assessment. and the clinical aspects of heart failure in different cardiac disorders, including ischemic heart disease. valvular heart disease. and the cardiomyopathies. There are sections on pharmacotherapy. the role of arrhythmias, exercise physiology. and neurohumoral mechanisms. The book also deals with newer inter ventional techniques. newer surgical procedures and some current problems relating to cardiac assist devices and heart and heart-lungs transplantation.

The Breathless Heart - Michele Emdin 2016-11-25

This book systematically focuses on central sleep apneas, analyzing their relationship especially with heart failure and discussing recent research results and emerging treatment strategies based on feedback modulation. The opening chapters present historical background information on Cheyne-Stokes respiration (CSR), clarify terminology, and explain the mechanics and chemistry of respiration. Following a description of the physiology of respiration, the pathophysiology underlying central apneas in different disorders and particularly in heart failure is discussed. The similarities and differences of obstructive and central apneas are then considered. The book looks beyond the concept of sleep apnea to daytime CSR and periodic breathing during effort and contrasts the opposing views of CSR as a compensatory phenomenon or as detrimental to the failing heart. The diagnostic tools currently in use for the detection of CSR are thoroughly reviewed, with guidance on interpretation of findings. The book concludes by describing the various forms of treatment that are available for CSR and by explaining how to select patients for treatment.

Modulation of Oxidative Stress in Heart Disease - Sajal Chakraborti 2019-11-10

This book highlights the multifaceted roles of Reactive Oxygen Species (ROS) in modulating normal cellular and molecular mechanisms during the development of different types of heart disease. Each chapter in the book deals with the role that altered redox homeostasis plays in the pathophysiology of heart disease. In addition, the book explains how reactive oxidant species interact with their targets and provides novel strategies for attenuating oxidative stress-induced types of heart disease. The book not only covers ROS-induced response in heart disease at the cellular level, but also demonstrates that an imbalance of redox states has its roots in our genes, and explains the ways gene expression is regulated. In turn, it reviews potential sources of ROS, their pathological effects on the heart, and potential sites for therapeutic interventions.

Diastology E-Book - Allan L. Klein 2020-10-24
Accounting for more than 40% of all heart failure problems, diastolic heart failure is a complex and often difficult diagnosis with rapidly evolving diagnostic management protocols. Diastology: Clinical Approach to Heart Failure with Preserved Ejection Fraction, 2nd Edition, brings you up to date and equips you to successfully diagnose and manage even the most challenging incidences of diastolic heart failure and their comorbidities. It incorporates the latest guidelines for the diagnostic evaluation of the patient with suspected or known diastolic dysfunction, provides a comprehensive review of clinical conditions associated with heart failure with preserved ejection fraction, and describes the complementary role of imaging modalities and novel therapeutic approaches. Keeps you current with recent extensive changes in the understanding of the mechanisms of diastolic heart failure with preserved ejection fraction (HFpEF) that have resulted in dramatic changes in treatment guidelines. Covers the latest molecular, genetic, and cellular mechanisms behind diastolic heart failure as a basis for the latest clinical approaches, diagnosis, and treatment of common and uncommon pathological conditions such as hypertensive heart disease, cardiomyopathies, arterial and valvular diseases, pericardial diseases, congenital heart disease, diabetes mellitus, and metabolic syndrome. Features 50 video cases, new key summary points, new multiple-choice review questions, and six new chapters: Evaluation of Diastolic Function by Radionuclide Techniques; Diastology Stress Test; ASE/EACVI Diastolic Guidelines; Valve Disease; Perioperative Assessment of Diastolic Dysfunction; and Pulmonary Hypertension. Reviews new techniques and indices for assessing diastolic function, such as 3D echo, strain rate imaging, late gadolinium enhancement and T1-mapping by CMR, and novel nuclear scintigraphic methods – as well as the traditional indices of LV filling, LA function, and tissue Doppler indices. Covers emerging topics such as the role of neurohormones, global and regional systolic function of the left ventricle, chronotopic incompetence and pacing, aging, perioperative assessment, and more. Presents information in a quick-retrieval format, covering Epidemiology, Pathophysiology, Diagnostic Evaluation, Differential Diagnosis, Treatment, and Future Directions. Helps you learn efficiently and prepare for self-assessment with key summaries and multiple-choice questions and answers for each chapter.

Cardiovascular Disease in the Elderly - Gary Gerstenblith 2007-11-03
A panel of clinicians, researchers, and leaders in the field review and discuss the latest findings on the pathophysiology, diagnosis, and management of cardiovascular disease in the older patient. The authors explain the physiological changes associated with the normal aging process that may lead to the development of disease, to adverse consequences once disease develops, and which alter the risk-benefit equation for medical and other interventions designed to diagnose, assess, and treat cardiovascular disease. The focus is on particularly common syndromes in the elderly, including cardiac failure with normal ejection fraction, isolated systolic hypertension, and atrial fibrillation. Wherever possible, the authors take an evidence-based approach to recommendations and rely heavily on prospective clinical trials.

Heart Rhythm Disorders - J. Anthony Gomes 2020-06-30
This engaging book covers a multitude of topics related to heart rhythm disorders (HRDs) and uniquely familiarizes readers with the development of treatment modalities over the past several decades, including the evolution of anti-arrhythmic drugs, pacemakers, defibrillators, and catheter ablation. Organized in ten sections, this title serves as both an archival and a contemporary resource for clinicians. The first section describes the discovery of the circulatory system by William Harvey in 1628 and outlines the development and understanding of HRD since the advent of intra-cardiac electrophysiology. Subsequent sections discuss the historical evolution of abnormal heart rhythms, such as supra and ventricular rhythms and sudden cardiac death, their treatment with drugs, surgery, pacemakers, implantable defibrillators and catheter ablation. Section nine offers a fascinating narration of the clinical evolution of overcoming heart attacks and its impact on

HRDs. The final section explores potential new frontiers in HRD and the factors that may contribute to the prospective rise of cardiovascular diseases. A ground-breaking and invaluable addition to the clinical literature, Heart Rhythm Disorders: History, Mechanisms and Management Perspectives details the pervasive nature of cardiovascular diseases in human history, their ramifications, and their projected effects on at-risk demographic populations and human health in general.

Cardiac Regeneration - Masaki Ieda 2017-10-27

This Volume of the series Cardiac and Vascular Biology offers a comprehensive and exciting, state-of-the-art work on the current options and potentials of cardiac regeneration and repair. Several techniques and approaches have been developed for heart failure repair: direct injection of cells, programming of scar tissue into functional myocardium, and tissue-engineered heart muscle support. The book introduces the rationale for these different approaches in cell-based heart regeneration and discusses the most important considerations for clinical translation. Expert authors discuss when, why, and how heart muscle can be salvaged. The book represents a valuable resource for stem cell researchers, cardiologists, bioengineers, and biomedical scientists studying cardiac function and regeneration.

Fast Facts: Heart Failure - Dariusz Korczyk 2022-03-31

A better understanding of the mechanisms and pathophysiological pathways of heart failure (HF), improved management of associated comorbidities, and advances in identifying genetic cardiac disease have led to a near-revolution in the management of patients in terms of pharmacological treatments, surgery and devices. These developments have transformed outcomes and HF-associated mortality, and gene therapies further promise a brighter future for patients who experience the debilitating effects of HF. This new edition of 'Fast Facts: Heart Failure' starts with the definitions of HF (different types of HF require different treatments), then provides the latest thinking on mechanisms and clinical stages, underlying causes and the assessment and management of comorbidities. This is followed by simple diagnostic criteria and a comprehensive overview of investigations. The management chapters focus on the importance of self-care education and healthy lifestyle choices, together with the latest recommendations for pharmacological treatment, device therapy and cardiac surgery from international guidelines. The final chapter on developments is an indication of the ongoing innovation in this rapidly moving field. Table of Contents: • Definitions, classification and epidemiology • Pathophysiology and clinical stages • Causes • Comorbidities • Diagnosis • General management and lifestyle considerations • Pharmacological treatment • Non-pharmacological management • Advanced HF therapies • Prognosis • Developments and future directions

Diastolic Heart Failure - Otto A. Smiseth 2007-10-26

Heart failure is the biggest killer in the western world, and the prevalence is expected to increase due to aging of the population. Over the past decade there has been an increasing awareness of left ventricular (LV) diastolic dysfunction as a mechanism of congestive heart failure. This book provides the clinician with essential insights into the epidemiology and aetiology of diastolic heart failure, and will enable them to understand how the condition can be diagnosed. Furthermore, the book will provide insights in cardiac function that are needed to perform and interpret the diagnostic tests, and to provide some guides to treatment choices.

Cardiology Explained - Euan A. Ashley 2004

One of the most time-consuming tasks in clinical medicine is seeking the opinions of specialist colleagues. There is a pressure not only to make referrals appropriate but also to summarize the case in the language of the specialist. This book explains basic physiologic and pathophysiologic mechanisms of cardiovascular disease in a straightforward manner, gives guidelines as to when referral is appropriate, and, uniquely, explains what the specialist is likely to do. It is ideal for any hospital doctor, generalist, or even senior medical student who may need a cardiology opinion, or for that ma.

Pathophysiology of Cardiovascular Disease - Naranjan S. Dhalla 2012-12-06

Pathophysiology of Cardiovascular Disease has been divided into four sections that focus on heart dysfunction and its associated characteristics (hypertrophy, cardiomyopathy and failure); vascular dysfunction and disease; ischemic heart disease; and novel therapeutic interventions. This volume is a compendium of different approaches to understanding cardiovascular disease and identifying the proteins, pathways and processes that impact it.

Pediatric Heart Failure - Robert Shaddy 2019-08-30

The first book of its kind, this reference describes current diagnostic and treatment strategies for acute and chronic heart failure in the fetus, neonate, child, and young adult-encompassing every aspect of pediatric heart failure including historical perspectives, the latest technologies in mechanical circulatory support, and recent information on the psychosocial aspects of heart failure in children.

Acute Heart Failure - Alexandre Mebazaa 2009-12-24

For many years, there has been a great deal of work done on chronic congestive heart failure while acute heart failure has been considered a difficult to handle and hopeless syndrome. However, in recent years acute heart failure has become a growing area of study and this is the first book to cover extensively the diagnosis and management of this complex condition. The book reflects the considerable amounts of new data reported and many new concepts which have been proposed in the last 3-4 years looking at the epidemiology, diagnostic and treatment of acute heart failure.

Oxford Textbook of Heart Failure - Andrew L. Clark 2022

Taking the reader from an understanding of the basic mechanisms of heart failure through to an appreciation of the complexities of heart failure management and the remarkable improvements possible with good treatment, the Oxford Textbook of Heart Failure 2e covers all aspects necessary to manage a patient with heart failure. In full colour throughout, containing over 300 illustrations, and supported by detailed referencing from the huge evidence base that has developed over the last two decades, the textbook also includes extensive chapters on common co-morbidities. The new edition has been completely updated in line with new British and European Guidelines and contains new chapters on; Natriuretic Peptides and Novel Biomarkers in Heart Failure, The Future of Heart Failure, and Regenerative Therapies. Essential reading for consultant cardiologists and those in training, general physicians and those caring of the elderly, cardiothoracic surgeons, primary care doctors, pharmacists, and specialist nurses.

From Hypertension to Heart Failure - Michael Böhm 2012-12-06

Arterial hypertension, coronary heart disease and heart fail ure are the commonest cardiovascular conditions to present in clinical practice. Over the past few years it has become in creasingly clear that they are closely and causally interrelated and that their relationship can have a significant bearing on prognosis. Epidemiological studies have shown that arterial hypertension is one of the most important risk factors for de veloping heart failure. Only one in four patients with hyper tension is adequately managed, and in 50% of cases, the hypertension has not been recognised or treated. Patients with pre-existing hypertension who go on to suffer an acute myocardial infarction have usually not previously had typi cal angina symptoms, the infarct territory is larger, life threatening arrhythmias are commoner and hence in-hospi tal mortality and long-term prognosis are markedly worse. The presence of raised blood pressure in the post-infarct phase doubles the risk of manifest heart failure. The close relationship between hypertension, coronary heart disease and heart failure makes the choice of therapeu tic strategy particularly important. Agents and classes of agents that have prognostic value in all three conditions should be considered first, as synergy might result in addi tional benefits. In such patients, this sort of therapeutic deci sion-making might have further advantages. The use of these agents may prevent complications which are not yet clinically obvious (such as heart failure).

Early Vascular Aging (EVA) - Peter M Nilsson 2015-08-06

Early Vascular Aging (EVA): New Directions in Cardiovascular Protection brings together the last decade of research related to the characterization of EVA, as well as the predictive

power of pulse wave velocity (PWV). The book presents a novel approach to the problem of cardiovascular disease, showing it in relation to great vessels disease and revealing a comprehensive approach to the problem of increased rigidity of the great vessels, its causes, and further consequences. Information provided is accompanied by online access to a supplemental website with video clips of anatomic specimens, cardiac imaging, and surgical procedures. Introduces the latest information on early vascular aging (EVA), complete with summaries of recent evidence and guidelines for relevant risk factor control Ideal reference for the study of vascular aging, pulse wave velocity, arteriosclerosis, EVA, arterial stiffness, vascular, PWV biomarkers, and cardiovascular disease Contains all the relevant information available from different fields of knowledge (from basic biology to epidemiology) in regard to EVA Provides evidence that leads to a new target for interventions, early vascular aging (EVA) in subjects with early onset increased arterial stiffness Includes online access to a supplemental website with video clips of anatomic specimens, cardiac imaging, and surgical procedures

Management of Heart Failure - Bertram Pitt 2008-07-31

Medical Management of Heart Failure brings together the current knowledge on the medical management of heart failure into one cohesive volume. It includes copious illustrations and photographic material that will explain the techniques and medical management of patients with heart failure in an effective modern format.

Hypotensive Syndromes in Geriatric Patients - Kannayiram Alagiakrishnan 2019-12-30

As the Baby Boomers age, concerns over healthcare systems abilities to accommodate geriatric patients grow increasingly challenging. The increased life expectancy of the population since the early 1900s had been built on the improvement of living conditions, diet, public health and advancement in medical care. With this we have seen a steady decline in the age-specific prevalence of vascular and heart diseases, stroke and even dementia. In addition, societies worldwide struggle to develop a large enough workforce to treat aging patients, which forces geriatric patients to rely on physicians in a wide array of specialties that are often not trained for their demographic. These trends have created a tremendous need for trustworthy resources, yet with regard to hypotensive syndromes, nothing of this nature exists. Hypotensive syndromes represent a heterogenous group of disease states. Hypotensive syndromes are characterized by low blood pressure following postural changes, meals and neck turning. These are common conditions seen in the elderly and could be due to blood pressure dysregulation. These syndromes frequently cause dizziness, syncope and falls in the elderly as well as a resultant decrease in function, and they are frequently mistaken for other conditions. This is especially true among physicians who are not trained to consider the unique needs of an aging patient. The proposed book is designed to present a comprehensive approach to the management of hypotensive syndromes in the elderly. Currently there are no guidelines or good resource to guide about these conditions. This book will also discuss the challenges of diagnosis and management of these conditions. The text introduces the concepts to set a clear foundation before covering the syndromes as they present in other comorbidities, including diabetes, heart failure, and a wide array of serious conditions that are common in older patients. As the Baby Boomers continue to age, this text will prove a vital resource for a wide array of specialties that will be increasingly critical to meeting their needs.

Management of Acute Decompensated Heart Failure - Christopher O'Connor 2005-11-29

Although the majority of heart failure represents the exacerbation of chronic disease, about 20% will present as a first time diagnosis. And although there are a number of intravenous agents that can be used for acute decompensated heart failure, there are no national guidelines currently available. Edited by a well-known expert and his team of con

The ESC Textbook of Cardiovascular Medicine - A. John Camm 2019