atherothrombosis and coronary artery disease

#atherothrombosis #coronary artery disease #heart disease #artery plaque buildup #blood clot formation

Explore the critical link between atherothrombosis, the formation of blood clots on arterial plaque, and its significant role in the development of coronary artery disease. This comprehensive overview explains how artery plaque buildup contributes to dangerous blood clot formation, increasing the risk of major cardiovascular events like heart attacks and strokes, and highlighting the importance of managing heart disease for overall well-being.

Atherothrombosis and Coronary Artery Disease

Written by the world’s foremost authorities, this volume provides comprehensive coverage of current approaches to the prevention, diagnosis, and management of atherothrombosis and its coronary and noncoronary complications. This edition has been thoroughly updated, sharply focused on clinical information, and trimmed to one manageable volume. Coverage begins with a review of risk factors and prevention, emphasizing lipid abnormalities, hypertension, smoking, diabetes, and obesity. Subsequent sections examine the pathogenesis of atherosclerosis, markers and imaging, acute coronary syndromes, chronic stable angina, and noncoronary atherothrombosis. Clinical presentations, medical management, and the latest interventional strategies are included.

Atherothrombosis in Clinical Practice

Atherothrombosis is a practical, clinically-relevant guide to the many manifestations of atherothrombosis, with an emphasis on evolving therapeutic approaches to the treatment and management of the condition.

Risk Factors in Coronary Artery Disease

Promoting developments in the diagnosis, prevention, and treatment of coronary artery disease, this reference furnishes the latest information on new and emerging risk factors for atherothrombotic vascular disorders-analyzing lipid-related and psychosocial risk factors, the genetic aspects of disease, the potential role of infection and inflammatio

Atherothrombosis and Coronary Artery Disease - Indian Edition

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Atherosclerosis and Coronary Artery Disease

Atherosclerosis is a subject of enormous contention for cardiologists and in general for all medical doctors. With this publication we have given you a concise "state-of-the-art" look at the world of atheroma. Many other elements could be included and so it is only a brief analysis of "today" (the preventive medicine era) and "tomorrow" (transforming the cure medicine era into the care medicine era) but also remembering "yesterday" (the ex-cathedra medicine era). Let's hope our arteries are free from atherosclerotic events: have a good read!

Atherosclerosis

Atherothrombosis has reached pandemic proportions worldwide. It is the underlying condition that results in events leading to myocardial infarction, ischemic stroke and vascular death. As such, it is the leading cause of death worldwide manifested mainly as cardiovascular/cerebrovascular death. The complex and intimate relationship between atherothrombosis and traditional and novel risk factors is discussed in the following chapters of Traditional and Novel Risk Factors in Atherothrombosis - from basic science to clinical and therapeutic concerns. Beginning with pathology and pathophysiology of atherothrombosis, plaque rupture/disruption, this book continues with molecular, biochemical, inflammatory, cellular aspects and finally analyzes several aspects of clinical pharmacology.

Traditional and Novel Risk Factors in Atherothrombosis

Atherosclerosis: Clinical Perspectives Through Imaging is aimed at practicing clinicians and relies on didactic tabular and bullet points and a host of fine imagery describing the common features of the imaging of atherosclerosis, enabling the reader to understand more about the advantages and limitations of each modality in investigating athersclosis. Edited by and contributed to by a host of international experts in cardiac imaging, this book is a must read by all who image the heart.

Atherosclerosis: Clinical Perspectives Through Imaging

Appreciation of the importance of platelets and coagulation factors in therothrombotic events has led to the widespread use and continuous development of new antithrombotic agents. This field of cardiovascular pharmacology has advanced at a very rapid rate. Understanding the basic principles of atherothrombosis as well as the pharmacological agents currently available or under clinical development are key to the successful treatment of patients with atherothrombotic manifestations, particularly coronary artery disease. Clinical Guide to the Use of Antithrombotic Drugs in Coronary Artery Disease presents the work of internationally renowned contributors who examine pharmacological principles, indications for use, and pitfalls of antithrombotic agents most commonly utilized in treating patients with coronary artery disease. They also describe special clinical scenarios which may call for a multi-pharmacological approach or which demonstrate various undesired effects of antithrombotic agents.

Clinical Guide to the Use of Antithrombotic Drugs in Coronary Artery Disease

Atherosclerosis and thrombosis are a major source of morbidity and mortality in the modern world. Great advances have been made in the past decades in our understanding of the pathophysiology of atherosclerosis and thrombus formation. This book offers a broad, contemporary review of atherosclerotic processes, with the latest research advances on inflammation and hypercoagulability that lead to thrombosis. In addition, experimental protocols are included, by which atherosclerotic processes are studied, providing the reader with the information necessary to understand the complexity of the disease process and the current experimental methodology in finding new answers that would help in the diagnosis, prevention and treatment of atherosclerotic disease.

Thrombosis, Atherosclerosis and Atherothrombosis

The ESC Textbook of Intensive and Acute Cardiovascular Care is the official textbook of the Acute Cardiovascular Care Association (ACVC) of the ESC. Cardiovascular diseases (CVDs) are a major

cause of premature death worldwide and a cause of loss of disability-adjusted life years. For most types of CVD early diagnosis and intervention are independent drivers of patient outcome. Clinicians must be properly trained and centres appropriately equipped in order to deal with these critically ill cardiac patients. This new updated edition of the textbook continues to comprehensively approach all the different issues relating to intensive and acute cardiovascular care and addresses all those involved in intensive and acute cardiac care, not only cardiologists but also critical care specialists, emergency physicians and healthcare professionals. The chapters cover the various acute cardiovascular diseases that need high quality intensive treatment as well as organisational issues, cooperation among professionals, and interaction with other specialities in medicine. SECTION 1 focusses on the definition, structure, organisation and function of ICCU's, ethical issues and quality of care. SECTION 2 addresses the pre-hospital and immediate in-hospital (ED) emergency cardiac care. SECTIONS 3-5 discuss patient monitoring, diagnosis and specific procedures. Acute coronary syndromes (ACS), acute decompensated heart failure (ADHF), and serious arrhythmias form SECTIONS 6-8. The main other cardiovascular acute conditions are grouped in SECTION 9. Finally SECTION 10 is dedicated to the many concomitant acute non-cardiovascular conditions that contribute to the patients' case mix in ICCU. This edition includes new chapters such as low cardiac output states and cardiogenic shock, and pacemaker and ICDs: troubleshooting and chapters have been extensively revised. Purchasers of the print edition will also receive an access code to access the online version of the textbook which includes additional figures, tables, and videos to better to better illustrate diagnostic and therapeutic techniques and procedures in IACC. The third edition of the ESC Textbook of Intensive and Acute Cardiovascular Care will establish a common basis of knowledge and a uniform and improved quality of care across the field.

The ESC Textbook of Intensive and Acute Cardiovascular Care

Exploring the entire range of recent advances, Atherosclerosis and Heart Disease covers all aspects of atherosclerotic disease, including chronic manifestations, bypass surgery, stroke prevention and methods to lower blood pressure. Professor Tonkin brings together a team of internationally-recognized experts to discuss sound clinical practices, based on scientific research and publications. They examine conventional and novel risk factors, acute coronary syndromes, and chronic manifestations of disease. The book provides a broad perspective on the disease process as it affects the patients doctors see every day and outlines current therapeutic strategies.

Atherosclerosis and Heart Disease

Stroke is a major cause of death and the major cause of adult neurological disability in most of the world. Despite its importance on a population basis, research into the genetics of stroke has lagged behind that of many other disorders. However, the situation is now changing. Anincreasing number of single gene disorders causing stroke are being described, and there is growing evidence that polygenic factors are important in the risk of apparently "sporadic" stroke.Stroke Genetics provides an up-to-date review of the area, suitable for clinicians treating stroke patients, and both clinical and non-clinical researchers in the field of cerebrovascular disease. The full range of monogenic stroke disorders causing cerebrovascular disease, including ischaemicstroke, intracerebral haemorrhage, aneurysms and arteriovenous malformations, are covered. For each, clinical features, diagnosis, and genetics are described. Increasing evidence suggest that genetic factors are also important for the much more common multifactorial stroke; this evidence isreviewed along with the results of genetic studies in this area. Optimal and novel strategies for investigating multifactorial stroke, including the use of intermediate phenotypes such as intima-media thickness and MRI detected small vessel disease are reviewed. The book concludes by describing apractical approach to investigating patients with stroke for underlying genetic disorders. Also included is a list of useful websites.

Stroke Genetics

Vascular management and care has become a truly multidisciplinary enterprise as the number of specialists involved in the treatment of patients with vascular diseases has steadily increased. While in the past, treatments were delivered by individual specialists, in the twenty-first century a team approach is without doubt the most effective strategy. In order to promote professional excellence in this dynamic and rapidly evolving field, a shared knowledge base and interdisciplinary standards need to be established. Pan Vascular Medicine, 2nd edition has been designed to offer such an interdisciplinary platform, providing vascular specialists with state-of-the art descriptive and procedural knowledge.

Basic science, diagnostics, and therapy are all comprehensively covered. In a series of succinct, clearly written chapters, renowned specialists introduce and comment on the current international guidelines and present up-to-date reviews of all aspects of vascular care.

PanVascular Medicine

Despite recent advances in the diagnosis and treatment of symptomatic atherosclerosis, available traditional screening methods for early detection and treatment of asymptomatic coronary artery disease are grossly insufficient and fail to identify the majority of victims prior to the onset of a life-threatening event. In Asymptomatic Atherosclerosis: Pathophysiology, Detection and Treatment, Dr. Morteza Naghavi and leading authorities from the Society for Heart Attack Prevention and Eradication (SHAPE) present a new paradigm for the screening and primary prevention of asymptomatic atherosclerosis. The text focuses on accurate, yet underutilized, measures of subclinical atherosclerosis, notably coronary artery calcium scanning and carotid intima-media thickness measurement. The authors introduce a comprehensive approach to identifying the vulnerable patients (asymptomatic individuals at risk of a near future adverse event). Additional chapters discuss future directions towards containing the epidemic of atherosclerotic cardiovascular disease using innovative solutions such as preemptive interventional therapies (bioabsorbable stents) for stabilization of vulnerable atherosclerotic plaques, mass unconditional Polypill therapy for population-based risk reduction, and ultimately vaccination strategies to prevent the development of atherosclerosis. Up-to-date and authoritative, Asymptomatic Atherosclerosis: Pathophysiology, Detection, and Treatment is a must-have for any cardiologist or primary care physician who wishes to practice modern preventive cardiology and manage the increasing number of asymptomatic atherosclerotic patients. Outlines more accurate measures of risk (coronary artery calcium and carotid intima-media thickness) than traditional risk factors (total cholesterol, LDL cholesterol, HDL cholesterol) Presents new multipronged strategies to aid in the early detection and treatment of high risk asymptomatic patients

Asymptomatic Atherosclerosis

Coronary Artery disease is one of the leading causes of death in industrialized countries and is responsible for one out of every six deaths in the United States. Remarkably, coronary artery disease is also largely preventable. The biggest challenge in the next years is to reduce the incidence of coronary artery disease worldwide. A complete knowledge of the mechanisms responsible for the development of ischaemic heart disease is an essential prerequisite to a better management of this pathology improving prevention and therapy. This book has been written with the intention of providing new concepts about coronary artery disease pathogenesis that may link various aspects of the disease, going beyond the traditional risk factors.

Coronary Artery Disease

This book has "wide geography" both literally and figuratively. First of all, this book brings together contributions from around the world, both from post-industrial countries and developing world. This is natural, because coronary artery disease is becoming pandemic worldwide. CAD is the single most frequent cause of death in developed countries, causes about 1 in every 5 deaths. Mortality from cardiovascular disease is predicted to reach 23.4 million in 2030. Moreover, in the developing world, cardiovascular disease tends to affect people at a younger age and thus could negatively affect the workforce and economic productivity. The morbidity, mortality, and socioeconomic importance of CAD make its diagnosis and management fundamental for all practicing physicians. On another hand, the book widely represents "geography" of CAD itself, i.e. many various aspects of its pathophysiology, epidemiology, diagnosis, treatment are touched in this book. This book does not pretend on complete and integral description of the Coronary artery disease. Rather, it contains selected issues on this complex multifactorial disease. Nevertheless, we hope that readers will find Coronary Artery Disease useful for clinical practice and further research.

Coronary Artery Diseases

This textbook is a readily accessible educational tool for all fellows undertaking subspecialty training in interventional cardiology, while also serving as a refresher to early career interventional cardiologists. The key objective is to equip the reader with an evidence-based expert-led resource focussed primarily on pre-procedural planning, peri-procedural decision-making, and the salient technical aspects of performing safe and effective coronary intervention, the intention being to support the therapeutic

decision-making process in the emergency room, coronary care unit or cath lab in order to optimize patient outcome. The Interventional Cardiology Training Manual provides readers with a step-by-step guide to the basic principles underpinning coronary intervention and facilitates rapid access to best practice from the experts, presented in a pragmatic, digestible and concise format. Uniquely, each chapter has been written in a heart center-specific manner, affording the reader an opportunity to learn how individual institutions perform a specific procedure, which algorithms and guidelines they follow and what evidence they draw on to instigate the best possible care for their patients.

The Interventional Cardiology Training Manual

The circulatory system provides the tissues of the body with oxygen and nutrients for survival, allows for the dissemination of inflammatory cells, and clears metabolic waste from building up and damaging tissue. Atherosclerotic disease, the build-up of fat, inflammatory cells, and fibrotic tissue in the vessel wall, hinders this function, resulting in inadequate perfusion of the target tissue. Hypoxia, or lack of oxygen, rapidly results in cellular dysfunction that profoundly affects the functionality of the overall tissue. Atherosclerosis-associated tissue ischemia and hypoxia because of loss of blood flow underlies several significant disease pathologies including ischemic heart disease, stroke, and peripheral artery disease. In this eBook, we examine the process of atherosclerotic plaque formation both at the cellular level and the level of clinical presentation. Through this book, we hope to impart to the reader a better understanding of how vessel structure, environmental risk factors, and genetic predisposition contribute to atherosclerotic disease and how current and future therapies seek to circumvent the cellular processes contributing to plaque formation to reduce atherosclerotic plaque burden and clinical complications. Table of Contents: List of Videos / Introduction to Atherosclerosis / Epidemiology / Endothelial Cell Activation and Arterial Hemodynamics / Cholesterol and Cardiovascular Disease / Inflammation in Atherosclerosis / Smooth Muscle Cells and Plaque Vulnerability / Diagnosing Atherosclerotic Disease / Treatment and Prevention / Summary and Future Perspectives / References / Author Biographies

Pathogenesis of Atherosclerosis

A book directed towards individuals with an interest in the clinical treatment of patients with unrevascularizable angina. It explores the treatment options in the setting of a sound scientific background and provides guidance and predictions for future directions in this rapidly developing field. It is the only textbook of its kind and fulfils an unmet need for practicing internal medicine, family practice and cardiovascular clinicians. It also provides a reliable reference for clinical and basic researchers interested in this topic.

The History of Coronary Heart Disease

This straightforward guide to the recognition and management of ischemic heart disease provides clinically relevant information needed by today’s medical practitioners. The book covers the disease’s epidemiology, pathogenesis, clinical presentation, diagnostic tests, differential diagnosis, treatment, and prognosis. Topics include detection of myocardial ischemia/infarction, silent myocardial ischemia, chronic arrythmias and conduction disorders, left ventricular dysfunction, percutaneous coronary intervention, and coronary artery bypass surgery. The authors also discuss primary prevention and management strategies. High-quality color photographs, line diagrams, and radiographs enhance the text.

Coronary Artery Disease

New updated edition first published with Cambridge University Press. This new edition includes 29 chapters on topics as diverse as pathophysiology of atherosclerosis, vascular haemodynamics, haemostasis, thrombophilia and post-amputation pain syndromes.

Ischemic Heart Disease

Edited by Valentin Fuster, former Chairman of the American Heart Association's Committee on Vascular Lesions, Assessing and Modifying the Vulnerable Atherosclerotic Plaque explores the cutting-edge developments in a steadily advancing field. This monograph is a valuable multidisciplinary resource, written by experts in the fields of mechanical and electrical engineering, pathology, neurology, imaging, clinical and vascular biology, physics, radiology and surgery. The book's nineteen chapters and five transcribed Panel Discussions provides a wealth of information on the identification and treatment of

atherosclerotic plaques, including the latest diagnostic applications of numerous imaging techniques, the reasons for selecting a particular method, and what can be learned from the imaging results. Important insights into the structural and cellular components of vulnerable plaque are presented, as well as an examination of factors/activities that trigger thrombosis.

Mechanisms of Vascular Disease

Atherosclerosis is a chronic inflammatory disease that affects medium and large-sized arteries. It begins after birth and the progression depends on several factors - traditional triad: hypertension, hyperlipidemia and diabetes mellitus, then age, sex, smoking and sedentary life-style. At the beginning atherosclerosis is asymptomatic and we cannot estimate appropriately its frequency, but its complications - coronary artery diseases, cerebrovascular diseases, peripheral arterial diseases, which occur late, are responsible for more than half of the yearly mortality in the world. Unfortunately, sudden cardiac death may be the first clinical manifestation. The incipient event is endothelial dysfunction, as a result of injury, caused by high level of cholesterol [especially w-density-lipoprotein LDL], hyperglycemia, hypertension, smoking, infectious agents, and toxins. Endothelial cells overexpress adhesion molecules - vascular cell adhesion molecule-1 [VCAM-1] and increases recruitment of inflammatory cells - monocytes [Mo], T-cells and subsequent release of monocyte chemo-attractant protein-1 [MCP-1] that results in additional leucocytes recruitment. Injured endothelium allows migration of inflammatory cells that release cytokines and lipids into the intima. That leads to cytokine-mediated progression of atherosclerosis and oxidation of LDL. Macrophages [MP] take up oxi-LDL and form foam-cell. They have metabolic activity and produce cytokines, proliferation of smooth muscle cells and formulate athero-fibrose plaque. Atherosclerotic plaque is composed of superficial layer - fibrose cap and lipid core, that consists of foam cells, extracellular lipid and necrotic cellular debris. It progresses as a result of accumulation of lipid and proliferation of smooth muscle cells and results in luminal narrowing of the arteries which leads to compromised blood and oxygen supply to the tissues. The gradually growing atherosclerotic plaques have thick fibrose cap and are stable. They cause symptoms of stable angina. Rapidly growing plaques cause unstable coronary artery disease. These plaques are mainly composed of lipids and have tiny fibrose cap that is prone to fissuring or rupture. Intraplaque hemorrhage from microvessels in plaque initiate platelet adhesion and activation of coagulation cascade that leads to platelet thrombus formation, i.e. promote thrombogenesis. Knowledge of the pathogenesis of the atherothrombosis modifies the diagnostic and therapeutic approach. Conclusion: Attention should be focused on the management of three points: 1. Endothelial dysfunction [correction of modified risk factors: hypertension, hyperlipidemia, diabetes mellitus, life-style-smoking, physical activity and food], 2. Atherosclerosis [modification of the inflammatory cascade, i.e. elimination of inflammatory pathways and inhibition of oxidation of LDL], 3. Thrombogenesis [inhibition of platelet adhesion, activation and aggregation].

Assessing and Modifying the Vulnerable Atherosclerotic Plaque

This is an unusually comprehensive 2001 account of the broad range of medical implications of homocysteine.

Atherosclerosis

This book is a comprehensive and richly-illustrated guide to cardiac CT, its current state, applications, and future directions. While the first edition of this text focused on what was then a novel instrument looking for application, this edition comes at a time where a wealth of guideline-driven, robust, and beneficial clinical applications have evolved that are enabled by an enormous and ever growing field of technology. Accordingly, the focus of the text has shifted from a technology-centric to a more patient-centric appraisal. While the specifications and capabilities of the CT system itself remain front and center as the basis for diagnostic success, much of the benefit derived from cardiac CT today comes from avant-garde technologies enabling enhanced visualization, quantitative imaging, and functional assessment, along with exciting deep learning, and artificial intelligence applications. Cardiac CT is no longer a mere tool for non-invasive coronary artery stenosis detection in the chest pain diagnostic algorithms; cardiac CT has proven its value for uses as diverse as personalized cardiovascular risk stratification, prediction, and management, diagnosing lesion-specific ischemia, guiding minimally invasive structural heart disease therapy, and planning cardiovascular surgery, among many others. This second edition is an authoritative guide and reference for both novices and experts in the medical imaging sciences who have an interest in cardiac CT.

Atherosclerosis and Coronary Heart Disease

Previous studies have shown that TSPO as well as apolipoprotein E (Apo E) can be associated with processes such as cholesterol metabolism, oxidative stress, apoptosis, glial activation, inflammation, and immune responses. As a ligand for cell-surface lipoprotein receptors, apolipoprotein E can prevent atherosclerosis by clearing cholesterol-rich lipoproteins from plasma. Furthermore, TSPO takes part in the regulation of gene expression for proteins involved in adhesion, which potentially may play a role in platelet aggregation. There are indications that the Apo E protein is involve in platelet aggregation, while TSPO platelet levels have been found to be increased with various neurological disorders, in particular, in stress-related disorders. The role of platelets in atherogenesis and the potential therapeutic impact of TSPO ligands on disease prevention are of great interest. To determine TSPO binding characteristics in this paradigm, we applied binding assays with [3H]PK 11195 on isolated platelets and erythrocyte membranes. The in vivo findings in Apo E knockout mice revealed that TSPO levels appear to be enhanced in platelets and erythrocytes of Apo E knockout mice, and thus suggest that TSPO and Apo E expression may be interconnected in relation to some aspect of the host defense response. Other organs tested, such as liver, testis, brain, heart, aorta, lung, kidney and spleen, did not show a difference in TSPO binding levels between Apo E knockout mice and wild-type mice. This suggests that TSPO levels may be part of a feedback control system for steroid production (responding to alterations in steroid levels), rather than being regulated by a feed-forward signal provided by cholesterol (id est TSPO levels in relation to steroidogenesis are not being regulated by cholesterol levels in vivo).

Homocysteine in Health and Disease

A comprehensive, quick-reference guide to the diagnosis and management of peripheral artery disease for non-specialists With an aging population subject to an increasing number of health risks, peripheral artery disease (PAD) is on the rise throughout the world. Because of PAD's direct links to heart attack and stroke, it is critical that internists, surgeons, cardiologists, radiologists, gerontologists, GPs, and family practitioners know how to recognize it and make the best treatment recommendations for their patients. This book provides all the expert, practical information and guidance they need to do just that. Edited by two thought leaders in PAD diagnosis and treatment, and comprising chapters written by subject matter experts, Peripheral Artery Disease, Second Edition provides clinicians with guidance on how to diagnose and treat one of the most under-diagnosed conditions affecting millions of patients. This updated and revised edition of the popular guide distills the complexities of PAD into clear, actionable advice for busy medical practitioners, providing them with the information they need—when they need it. Provides clinicians with essential information for recognizing and treating this under-diagnosed condition that affects millions of patients Distills the complexities of PAD, from diagnosis to traditional and emerging treatment options, into clear, actionable advice for clinicians Covers PAD epidemiology, office examination, imaging, laboratory evaluation, medical therapy, surgical interventions, endovascular treatments, and much more Reflects the latest PAD Guidelines and Performance Measures established by leading specialty societies Features contributions from internists and surgeons, all recognized experts in PAD Peripheral Artery Disease, Second Edition is an important working reference for internists, cardiologists, radiologists, and surgeons, as well as fellows and residents in those fields.

CT of the Heart

The trusted landmark cardiology resource thoroughly updated to reflect the latest clinical perspectives Includes DVD with image bank Through thirteen editions Hursts the Heart has always represented the cornerstone of current scholarship in the discipline. Cardiologists, cardiology fellows and internists from across the globe have relied on its unmatched authority breadth of coverage and clinical relevance to help optimize patient outcomes. The thirteenth edition of Hursts the Heart continues this standard-setting tradition with 19 new chapters and 59 new authors, each of whom are internationally recognized as experts in their respective content areas. Featuring an enhanced reader-friendly design the new edition covers need-to-know clinical advances as well as issues that are becoming increasingly vital to cardiologists worldwide. As in previous editions you will find the most complete overview of cardiology topics available plus a timely new focus on evidence-based medicine health outcomes and health quality. New Features: 1548 full-color illustrations and 578 tables. Companion DVD with image bank includes key figures and tables from the text.

Thrombosis, Atherosclerosis and Atherothrombosis - New Insights and Experimental Protocols

Arteriosclerosis—Advances in Research and Treatment: 2012 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Arteriosclerosis. The editors have built Arteriosclerosis—Advances in Research and Treatment: 2012 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Arteriosclerosis in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Arteriosclerosis—Advances in Research and Treatment: 2012 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

Peripheral Artery Disease

This volume explores all aspects of vascular biochemistry and includes chapters that provide an understanding of vascular function with descriptions of tissue components present in the vascular wall as well as an exploration of the hemodynamic and metabolic activities associated with this function. In addition, some chapters explore the vasculature under conditions which mimic various disease states. The information provided in this volume will provide new insights into the mechanisms that control vascular function as well as therapies designed to treat vascular disease.

Hurst's the Heart

A fully integrated view of the medical and surgical aspects of both vascular and cardiovascular disease. Covering the complete spectrum of angiology, from basic physiologic principles to phlebology, this is the only text of its kind, and will thus be a must for the libraries of cardiologists and cardiovascular surgeons alike.

Arteriosclerosis—Advances in Research and Treatment: 2012 Edition

Advances in Coronary Heart Disease Research and Treatment: 2011 Edition is a ScholarlyBrief™ that delivers timely, authoritative, comprehensive, and specialized information about Coronary Heart Disease in a concise format. The editors have built Advances in Coronary Heart Disease Research and Treatment: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Coronary Heart Disease in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Advances in Coronary Heart Disease Research and Treatment: 2011 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

Vascular Biochemistry

This report considers the biological and behavioral mechanisms that may underlie the pathogenicity of tobacco smoke. Many Surgeon General's reports have considered research findings on mechanisms in assessing the biological plausibility of associations observed in epidemiologic studies. Mechanisms of disease are important because they may provide plausibility, which is one of the guideline criteria for assessing evidence on causation. This report specifically reviews the evidence on the potential mechanisms by which smoking causes diseases and considers whether a mechanism is likely to be operative in the production of human disease by tobacco smoke. This evidence is relevant to understanding how smoking causes disease, to identifying those who may be particularly susceptible, and to assessing the potential risks of tobacco products.

C-reactive Protein and Cardiovascular Disease

One of the major biomedical triumphs of the post-World War II era was the defmitive demonstration that hypercholesterolemia is a key causative factor in atherosclerosis; that hypercholesterolemia can be effectively treated; and that treatment significantly reduces not only coronary disease mortality but also all cause mortality. Treatment to lower plasma levels of cholesterol - primarily low density lipoprotein (LDL) cholesterol - is now accepted as best medical practice and both physicians and

patients are being educated to take aggressive measures to lower LDL. We can confidently look forward to important decreases in the toll of coronary artery disease over the coming decades. However, there is still uncertainty as to the exact mechanisms by which elevated plasma cholesterol and LDL levels initiate and favor the progression of lesions. There is general consensus that one of the earliest responses to hypercholesterolemia is the adhesion of monocytes to aortic endothelial cells followed by their penetration into the subendothelial space, where they differentiate into macrophages. These cells, and also medial smooth muscle cells that have migrated into the subendothelial space, then become loaded with mUltiple, large droplets of cholesterol esters . . . the hallmark of the earliest visible atherosclerotic lesion, the so-called fatty streak. This lesion is the precursor of the more advanced lesions, both in animal models and in humans. Thus the centrality of hypercholesterolemia cannot be overstated. Still, the atherogenic process is complex and evolves over a long period of time.

Textbook of Angiology

Contributors to this book have reviewed research from the fields of metabolic syndromes in view of their own research. The chapters cover the neural mechanisms of food intake and proposed factors related to obesity. The influences of the intake of sugar and lipids are also discussed. The relationships between cancer and venous thromboembolism in connection with obesity are discussed. Omega (É) fatty acids and trans-fatty acids are risks of cardiovascular diseases. Comparison of plasma levels of trans-fatty acids indicated that industrially produced trans-fatty acids are higher in American than Japanese men. Hopefully, the book provides information that readers want to obtain in the fields of food intake and metabolic syndromes.

Sudden Coronary Death

Advances in Coronary Heart Disease Research and Treatment: 2011 Edition