Focal Liver Lesions Detection Characterization Ablation Medical Radiology

Abdominal Ultrasound E-BookBlumgart's Surgery of the Liver, Pancreas and Biliary Tract E-BookTumor AblationContrast-Enhanced Ultrasound of Liver DiseasesColorectal CancerEnhancing the Role of Ultrasound with Contrast AgentsMedical Image Analysis and InformaticsLiver ImagingApplied RadiologyAbdominal Imaging E-BookLiver CancersUltrasound ElastographyLiver MalignanciesChallenges in Pancreatic PathologyRadiology Secrets Plus E-BookFocal Liver LesionsAdult Body MR, An Issue of Radiologic Clinics of North America,Atlas of Contrast-enhanced Sonography of Focal Liver LesionsLiver DiseasesFocal Masses in a Non-cirrhotic Liver: The Additional Benefit of CEUS Over Baseline ImagingDiseases of the Abdomen and Pelvis 2018-2021Multislice CTLung CancerPractical Management of Chronic Viral HepatitisHepatobiliary Imaging, An Issue of Magnetic Resonance Imaging Clinics of North America,MRI of the LiverEncyclopedia of ImagingLiver Research and Clinical ManagementMultidetector-Row Computed TomographyHepatocellular CarcinomaImage Feature Detectors and DescriptorsMethods of Cancer Diagnosis, Therapy, and PrognosisMagnetic Resonance ElastographyContrast Media in UltrasonographyContrast-Enhanced Ultrasound in Clinical PracticeAbdominal Ultrasound, An Issue of Ultrasound Clinics,Diagnosis and Treatment of Hepatocellular CarcinomaUpdates in Liver CancerHepatobiliary and Pancreatic RadiologySpiral CT of the Abdomen

Abdominal Ultrasound E-Book

The first book to cover the groundbreaking development and clinical applications of Magnetic Resonance Elastography, this book is essential for all practitioners interested in this revolutionary diagnostic modality. The book is divided into three sections. The first covers the history of MRE. The second covers technique and clinical applications of MRE in the liver with respect to fibrosis, liver masses, and other diseases. Case descriptions are presented to give the reader a hands-on approach. The final section presents the techniques, sequence and preliminary results of applications in other areas of the body including muscle, brain, lung, heart, and breast.

Blumgart's Surgery of the Liver, Pancreas and Biliary Tract E-Book

This book explores in detail the primary liver cancers of hepatocellular carcinoma and cholangiocarcinoma examining the pathogenesis of disease along with diagnosis and current management options together with exploration of future treatment strategies and areas of controversy. Furthermore, the book highlights management of the common secondary malignancies and touches on benign liver tumours and how to best manage these. Written in a clear and didactic style, this volume includes summaries of the key learning points and questions so that the reader can gauge their knowledge and understanding. This book is aimed to broaden the knowledge base of primary care physicians, general physicians along with specialists in hepatology, oncology and hepato-biliary surgery

Tumor Ablation

Recent technological developments have broadened considerably the role of magnetic resonance imaging in the evaluation of liver pathology. Today, MR imaging is not looked upon merely as a problem-solving technique but is widely considered the principal imaging modality for both the detection and accurate diagnosis of focal and diffuse liver disease. Advances in hardware and sequence design and the advent of novel contrast agents with liver-specific properties have contributed towards making MRI of the liver a routine clinical application. Compared with previous publications on the application of MRI to study the liver, this book stands out in at least three major respects: - It presents in a clear and concise manner the current approaches to routine MRI of the liver, taking account of the hardware and software currently available from the major manufacturers and proposing imaging protocols for each. - A vast number of illustrations describe the pathologic and radiological correlations of the principal focal and diffuse liver diseases. - It presents a practical rationale for the use of contrast agents with liver-specific properties. This book will prove invaluable to radiologists wishing to expand or consolidate their routine approach to MR imaging of the liver.

Contrast-Enhanced Ultrasound of Liver Diseases

There is an enormous sense of excitement in the communities of cancer research and cancer care as we move into the middle third of the ?rst decade of the 21st century. For the ?rst time,there is a true sense of c- ?dence that the tools provided by the human genome project will enable cancer researchers to crack the code of genomic abnormalities that allow tumor cells to live within the body and provide highly speci?c, virtually non-toxic therapies for the eradication,or at least ?rm control of human cancers. There is also good reason to hope that these same lines of inquiry will yield better tests for screening, early detection, and prev- tion of progression beyond curability. While these developments provide a legitimate basis for much op- mism, many patients will continue to develop cancers and suffer from their debilitating effects, even as research moves ahead. For these in- viduals, it is imperative that the cancer ?eld make the best possible use of the tools available to provide present day cancer patients with the best chances for cure, effective palliation, or, at the very least, relief from symptoms caused by acute intercurrent complications of cancer. A modality that has emerged as a very useful approach to at least some of these goals is tumor ablation by the use of physical or physiochemical approaches.

Colorectal Cancer

Continuous acquisition of new knowledge in Medicine is essential to ensure progression in diagnostics and therapeutics. In the last decade the discipline of Hepatology has achieved critical progress in the treatment of viral hepatitis. The present book has been realized by a team of experts daily facing clinical problems in the prevention and management of liver diseases and has been designed for a global readership to offer some practical tips to physicians who want update their level of practice in the field. Its a practical volume for daily reference but also an instrument for improving expertise in viral hepatology and discovering the

unresolved issues. Management of HBV and HCV hepatitis in young and elderly, HEV hepatitis, evaluation of liver fibrosis, hepatocellular carcinoma, vaccine and prevention and patient education are some of the most important topics covered by the authors. In addition, an outstanding chapter on the skin involvement during viral hepatitis and the tools to manage them during triple therapy is included in the book.

Enhancing the Role of Ultrasound with Contrast Agents

This volume presents a detailed survey of imaging, multidetector-row computed t- various methodologies related to diagno- ography, helical computed tomography, sis, therapy, and prognosis of liver cancer, ultrasonography, and power Doppler ult- including colorectal liver metastases and sound, for the prognosis and assessment of biliary tract carcinomas, while the already liver cancer treatment (including HCC) and published Volumes 1, 2, 3, and 4 detail liver metastases from colorectal cancer are similar aspects of breast, lung, prostate, discussed in detail, as is the use of radiof- gastrointestinal, and colorectal cancer, quency ablation in hepatic tumors. respectively. Approximately 50% of colorectal cancer Surgical resection is the standard therapy (CRC) patients develop liver metastases for resectable liver disease, resulting in during the course of their disease, and 5-year overall survival rates of 20–40%. more than 50% of patients who die of CRC One the other hand, the median overall have liver metastases at autopsy. Regional survival of patients with unresectable liver lymph node (RLN) involvement in patients metastases does not exceed 18–20 months, with colorectal liver metastases is one with a 5-year survival rate approaching of the worst prognostic factors. Recent zero. In other words, there is virtually no studies indicate that for these patients, long-term survival. Both resectable and combined liver resection and pedicular unresectable liver cancers are discussed lymphadenectomy can be recommended, in this volume. The method of selecting when RLN metastases respond to p- patients for resection of hepatic colorectal operative chemotherapy.

Medical Image Analysis and Informatics

This open access book deals with imaging of the abdomen and pelvis, an area that has seen considerable advances over the past several years, driven by clinical as well as technological developments. The respective chapters, written by internationally respected experts in their fields, focus on imaging diagnosis and interventional therapies in abdominal and pelvic disease; they cover all relevant imaging modalities, including magnetic resonance imaging, computed tomography, and positron emission tomography. As such, the book offers a comprehensive review of the state of the art in imaging of the abdomen and pelvis. It will be of interest to general radiologists, radiology residents, interventional radiologists, and clinicians from other specialties who want to update their knowledge in this area. This work was published by Saint Philip Street Press pursuant to a Creative Commons license permitting commercial use. All rights not granted by the work's license are retained by the author or authors.

Liver Imaging

Colorectal cancer (CRC) is a major health problem because it represents around 10% of all cancers and achieves a worldwide estimate of 1.4 million newly diagnosed cases annually, resulting in approximately 700,000 deaths. Approximately 19-31% of patients present liver metastases. At diagnosis, a further 23-38% will develop extra-hepatic disease. Over the past decade, the widespread use of modern chemotherapeutic and biological agents, combined with laparoscopic surgical techniques, has improved the prognosis of metastatic CRC. A better understanding of the biology of the tumor, along with high efficiency of diagnostic and therapeutic methods, as well as the spread of screening programs, will improve the survival of the CRC patients in the near future.

Applied Radiology

Using the accounts of 'pioneers' in contrast-enhanced ultrasound, this text offers an overview of second-generation contrast agents, depicting their clinical applications and presenting the most updated contrast-specific software for noncardiologic uses, especially for the study of liver diseases.

Abdominal Imaging E-Book

Each issue includes separate but continuously paged sections called: Nuclear medicine, and: Ultrasound

Liver Cancers

Highlights: Contrast-enhanced ultrasound in detection of focal liver lesions. Contrast-enhanced ultrasound in characterization of focal liver lesions. Contrast-enhanced ultrasound in differential diagnosis of focal liver lesions. Contrast-enhanced ultrasound in final diagnosis of focal liver lesions. Contrast-enhanced ultrasound in liver metastases screening. Roles of cross-sectional imaging techniques for focal liver lesions assessment. Advantages of contrast-enhanced ultrasound over other imaging procedures. Abstract: Incidentally detected focal liver lesions are commonly encountered in clinical practice presenting a challenge in the daily department work flow. Guidelines for the management of incidental focal liver lesions have been published but comments, illustrations and recommendations regarding practical issues are crucial. The unique features of contrast-enhanced ultrasound in non-invasive assessment of focal liver lesion enhancement throughout the vascular phases in real-time has allowed an impressive improvement in the diagnostic accuracy of ultrasound. We highlight the additional benefit of contrast-enhanced ultrasound over conventional B-mode ultrasound imaging in detection, characterization, differential and final diagnosis of focal liver lesions, as well as for liver metastases screening. The current roles of cross-sectional imaging are explained in detail, with indications and limitations for each procedure. The advantages of CEUS, such as non-ionizing radiation exposure, cost benefits, non-iodinate contrast agents, and repeatability are also described ultimately improving patient management.

Ultrasound Elastography

With the development of rapidly increasing medical imaging modalities and their applications, the need for computers and computing in image generation, processing, visualization, archival, transmission, modeling, and analysis has grown substantially. Computers are being integrated into almost every medical imaging system. Medical Image Analysis and Informatics demonstrates how quantitative analysis becomes possible by the application of computational procedures to medical images. Furthermore, it shows how quantitative and objective analysis facilitated by medical image informatics, CBIR, and CAD could lead to improved diagnosis by physicians. Whereas CAD has become a part of the clinical workflow in the detection of breast cancer with mammograms, it is not yet established in other applications. CBIR is an alternative and complementary approach for image retrieval based on measures derived from images, which could also facilitate CAD. This book shows how digital image processing techniques can assist in quantitative analysis of medical images, how pattern recognition and classification techniques can facilitate CAD, and how CAD systems can assist in achieving efficient diagnosis, in designing optimal treatment protocols, in analyzing the effects of or response to treatment, and in clinical management of various conditions. The book affirms that medical imaging, medical image analysis, medical image informatics, CBIR, and CAD are proven as well as essential techniques for health care.

Liver Malignancies

The assessment of the pancreas is a challenging problem because it has a profound location and it often presents difficulties in diagnosis and treatment. Despite many efforts in dealing with pancreatic diseases, the pathogenesis is not completely understood, the symptoms and imaging methods are unspecific, and the treatment possibilities are sometimes very limited. The major purpose of this book is to offer the reader a better understanding of the challenging aspects in pancreatic pathology, starting with anatomy and following with different pancreatic pathology. More space is allotted to pancreatic cancer, including surgical procedures, and to the management of the cystic lesions of the pancreas. This book is meant to provide a thorough guide for the best approaches in some of the difficult problems in pancreatology.

Challenges in Pancreatic Pathology

The value of ultrasound contrast agents (USCA) in everyday clinical practice depends on the pharmacokinetics, the signal processing, and the contrast-specific imaging modalities. Second-generation USCA, are blood pool agents that do not leak into the organ tissue to be examined but remain in the intravascular compartment increasing the Doppler signal amplitude during their dynamic vascular phase. Taking advantage of the stability of their microbubbles, they can withstand the acoustic pressure of insonation much better than first-generation contrast media, which results in an increased half-life of the agent and, consequently, in a prolonged diagnostic window. Concomitant with the improvement of contrast agents, different contrast-specific imaging modalities have been developed which, used in combination with USCA and a low mechanical index, allow continuous real-time grey-scale imaging. These recent technical improvements have opened new possibilities in the use of USCA in a variety of indications. Written by internationally renowned experts, the contributions

gathered in this book give an overview of current and possible future new applications of USCA in routine and clinical practice.

Radiology Secrets Plus E-Book

Comprehensive and complete, Blumgart's Surgery of the Liver, Pancreas and Biliary Tract – edited by Dr. William R. Jarnagin and a team of experts- delivers the comprehensive, cutting-edge guidance you need to achieve optimal outcomes in surgery of the liver, biliary tract, and pancreas. Edited by a panel of experts and featuring contributions by many leading authorities, this 2-volume reference brings you the latest information on pathology, diagnostics, surgery, and non-operative intervention all in one source. At www.expertconsult.com you can not only access the complete contents online, but also an abundance of detailed illustrations and step-by-step procedural video clips from the Memorial Sloan Kettering video library that show you how to perform key procedures step by step. Glean all essential, up-to-date, need-to-know information in one comprehensive reference that provides extensive coverage of pathology, diagnostics, surgery, and non-operative intervention as well as hepatobiliary and pancreatic surgery. Deepen your understanding of surgical anatomy to help with diagnosis, surgical operation, interventional radiology, and endoscopy. See how to perform key procedures by watching operative videos from the Memorial Sloan Kettering video library. Apply the most advanced diagnostic and management options for each disease, including interventional techniques. Stay current with the latest knowledge and advancements including minimally invasive techniques in hepatic resection; surgical considerations for congenital disorders of the pancreas; non-surgical therapies for pancreatic cancer; microwave ablation and other emerging technologies; the most recent developments in the rapidly changing area of transplantation; and the newest best practices in pre- and post-operative care and blood transfusion. Get in-depth coverage of the pancreas from the only fully comprehensive text on both hepatobiliary and pancreatic surgery. Learn from the very best. Rely on the trusted guidance of experts, with a fresh perspective from senior editor, Dr. William Jarnigan, who has earned a national and international reputation in the surgical management of diseases of the biliary tract. Access the full text online at www.expertconsult.com, along with image and video libraries, tables, figures, and more! Over 200 additional contributing experts. A single, comprehensive reference that covers pathology, diagnostics, surgery, and non-operative intervention all in one text!

Focal Liver Lesions

This issue, edited by Drs. Peter Liu and Richard Abramson, will comprehensively review imaging of the hepatobiliary system. Articles will include: Hepatic MRI Techniques, Optimization, and Artifacts, MR Contrast Agents for Liver Imaging, Focal Liver Lesion Characterization in Noncirrhotic Patients: An MR Approach, MRI in Cirrhosis and Hepatocellular Carcinoma, Understanding LI-RADS: A Primer for Practical Use, MRI of the Liver after Locoregional and Systemic Therapy, Diffusion Weighted Imaging of the Liver: Techniques and Applications, Hepatic Iron and Fat Quantification Techniques, Perfusion Imaging in Liver MRI, MR Elastography, Treatment Planning Before Hepatobiliary Surgery: Clinical and Imaging Considerations, MRI/MRCP of Benign and Malignant Biliary Conditions, and more!

Adult Body MR, An Issue of Radiologic Clinics of North America,

The advent of spiral CT has led to a breakthrough in abdominal imaging. This illustrated volume, written by US and European experts in the field, provides technical information on the modality and considers the key pathologies of each abdominal organ system in which spiral CT has resulted in major diagnostic improvements.

Atlas of Contrast-enhanced Sonography of Focal Liver Lesions

This book provides an in-depth coverage not only of liver pathology but also of diagnosis of the numerous types of liver disease, placing specific emphasis on current treatments of liver pathology including the most up-to-date information on liver transplantation. The first part of provides an in-depth account of the liver pathology in different conditions such as Hepatits, liver ischaemia reperfusion injury, Lyme disease, cirrhotic cardiomyopathy and hepatocellular carcinoma. The second part provides a comprehensive overview of diagnostic methods. Of particular interest are chapters on the latest techniques in Patient-specific 3D printing and transient elastography (FibroScan). The final part focuses on treatment and provides a step-by step guide to the therapeutic management of liver diseases starting with pharmacological treatment and techniques including surgery and liver transplantation. This is an invaluable book for clinicians, practitioners including academics, scientists/researchers and postgraduates to provide the newest knowledge in the field of liver pathogenesis. It is written by a multidisciplinary team of experts in hepathology, gastroenterology, and surgery especially from liver transplantation.

Liver Diseases

This is the second, revised edition of the very successful volume on multislice CT published only 2 years ago. A second edition became necessary so swiftly due to the rapid technical developments in multi-detector row technology; a huge amount of new experimental and clinical data has recently become available. This book is the most comprehensive up-to-date work on all aspects of the clinical applications of this fascinating imaging technique. It contains information on the very latest developments in the field, as well as numerous superb illustrations. I am very much indebted to the editors of this volume, M. F. Reiser, M. Takahashi, M.Modic and C.R.Becker - all renowned international experts in computer tomogra phy - for the immense dedication and tireless effort involved in preparing and editing this superb volume in a record brief period of time. I would like to congratulate the editors and the contributing authors, all selected for their exceptional expertise, on the outstanding quality of the different chapters and the wide range of topics covered.

Focal Masses in a Non-cirrhotic Liver: The Additional Benefit of CEUS Over Baseline Imaging

Radiology Secrets Plus—a Secrets Series title in the new PLUS format—offers an easy-to-read, information-at-your-fingertips approach to radiology. Drs. E. Scott

Pretorius and Jeffrey A. Solomon provide the expert perspective you need to grasp the nuances of this specialty. This new edition offers more information and expanded full color visual elements to provide an overall enhanced learning experience. All this, along with the popular question-and answer approach, makes it a perfect concise board review tool and a handy clinical reference. Maintains the popular and trusted Secrets Series® format, using questions and short answers for effective and enjoyable learning. Provides the most current overview and authoritative coverage of all topics thanks to contributions from an impressive list of experts in the field of radiology. Introduces the new PLUS format, with an expanded size and layout and full color for easier review, more information, and more visual elements for an overall enhanced experience. Provides the current standards of radiology practice through thorough updates to every chapter that reflect the most up-to-date information. Contains more, larger images (including new full color PET and CT images), to offer a clearer picture of what is seen is practice.

Diseases of the Abdomen and Pelvis 2018-2021

Examines in detail the different clinical applications of microbubble-based contrast agents. Explains the principles underlying the use of contrast-specific imaging techniques and the examination methodology. Contains numerous high-quality illustrations, including many in color. Written by recognized experts.

Multislice CT

Hepatocellular carcinoma (HCC) currently ranks as the third most common cause of death. As the primary malignancy of the liver is directly related to an underlying liver condition, its incidence and profile are expected to change soon. While effective prevention programs and antiviral therapies for hepatitis B and C will lower the incidence of HCC, emerging socioeconomic issues will deliver new at-risk populations. Moreover, diagnostic techniques and protocols have undergone significant advancements. Reliance on contrast enhanced ultrasound has been re-evaluated, imaging methods being considered as sufficient diagnostic tools. Molecular characterization remains desirable, since chemotherapeutic agents still have limited applicability. In light of recent diagnostic advancements and novel therapeutic solutions, it is our belief that a comprehensive update on recent paradigm shifts and interesting upcoming developments is highly needed.

Lung Cancer

A comprehensive and up-to-date overview of the role of diagnostic and interventional radiology in respect of liver malignancies. Following background chapters on anatomy, epidemiology, and clinicopathologic features, each of the diagnostic imaging techniques is carefully appraised, focusing on new developments in equipment and contrast agents. The interventional therapeutic approaches to primary and secondary hepatic malignancies are then discussed in depth, as well as such special topics as liver tumors in children and hepatic transplantation. Written by leading experts from around the world, this will prove to be an indispensable source of information for both clinicians and researchers.

Practical Management of Chronic Viral Hepatitis

"This book provides a practical approach for imaging of focal and diffuse liver lesions based on state-of-the-art MR and CT imaging sequences, multidetector row CT images, 3D reformatted images, breath-hold MRI sequences, and cutting-edge MR 3T images where appropriate, concise but useful figure legends, relevant and systematic (differential) diagnostic information, the latest references to primary literature and clinical evidence, and patient management possibilities"--Provided by publisher.

Hepatobiliary Imaging, An Issue of Magnetic Resonance Imaging Clinics of North America,

Liver cancers result in considerable amount of financial and social burden. On the other hand, researches and clinical studies related to liver cancers continue to advance at a rapid pace. The chapters in this book provide state-of-the-art reviews on the current knowledge and advances in research and management of liver cancers. It includes the most recent advances in that field, particularly, hepatocarcinogenesis and the potential role of intestinal microbiota, nonalcoholic steatohepatitis, cancer stem cells, aldehyde dehydrogenase-1, and hepatitis B virus. This book also discusses the methods of diagnosis of HCC, the minimally invasive therapies for liver cancers, living donor liver transplantation for HCC, surgical management of liver metastases from colorectal cancers, and assessment and optimization for the future liver remnant.

MRI of the Liver

Hepatology is the medical specialty that studies the normal functioning of the liver and its diseases. It has experienced a steady progress in recent decades, as well as occurred in other medical specialties. It deals with the acute and chronic inflammatory processes of the liver, among which is the viral hepatitis. Recently, very effective drugs have been introduced in this field that achieves the elimination of the hepatitis C virus in the great majority of patients. Nonalcoholic steatohepatitis has increased markedly worldwide especially in Western countries in relation to overweight, diabetes, and other metabolic conditions. Cirrhosis and its complications are better managed, and patients live longer, thanks also to the earlier detection of hepatocarcinoma and the generalization of the use of liver transplants. This book deals with all of these interesting topics, thanks to the excellent collaboration of a great group of specialists that have collaborated with their knowledge and expertise in this edition.

Encyclopedia of Imaging

The book is edited by a multidisciplinary team, with an international group of contributors. After discussing the basic and clinical aspects of HCC the main focus of the book is on diagnosis and therapy. The book is both authoritative and practical, providing expert guidance on the various techniques used in diagnosis, such as ultrasound, CT and MRI and the appropriate therapeutic options, for example, surgical resection, transcatheter therapies and radiofrequency ablation.

It is fully illustrated throughout in both colour and black and white.

Liver Research and Clinical Management

Abdominal Imaging, a title in the Expert Radiology Series, edited by Drs. Dushyant Sahani and Anthony Samir, is a comprehensive reference that encompasses both GI and GU radiology. It provides richly illustrated, advanced guidance to help you overcome the full range of diagnostic, therapeutic, and interventional challenges in abdominal imaging and combines an image-rich, easy-to-use format with the greater depth that experienced practitioners need. Select the best imaging approaches and effectively interpret your findings by comparing them to thousands of images that represent every modality and every type of abdominal imaging. Find detailed, expert guidance on all diagnostic, therapeutic, and interventional aspects of abdominal imaging in one authoritative source, including challenging topics such as Oncologic Assessment of Tumor Response and How to Scan a Difficult Patient. Efficiently locate the information you need with a highly templated, well-organized, at-a-glance organization.

Multidetector-Row Computed Tomography

Multidetector-row computed tomography (MDCT) has advanced the approach to diagnostic assessment of many pathologies and now plays an integral role in imaging of both abdominal and cardiovascular diseases. The possibility to acquire diagnostic images with shorter scan duration, longer scan ranges, and/or thinner sections, MDCT has facilitated the opening of new horizons, such as interventional MDCT and functional imaging in stroke and oncology. In addition, advanced postprocessing techniques now permit high quality volumetric imaging in combination with maximum intensity projections, volume rendering, curved planar reformations and multiplanar reconstructions. This volume gathers contributions by internationally renowned specialists in the field who, through presenting their clinical experience, provide a thorough overview not only of MDCT and its practical applications, but also of workflow management in everyday clinical practice. Focussing on scanning and contrast protocols, the current advantages and disadvantages of non-enhanced vs. enhanced MDCT are discussed, along with insights into likely future developments. The volume represents an up-to-date source of technical and practically-oriented clinical information which should prove of great benefit to all who wish to improve or consolidate their knowledge and expertise in MDCT.

Hepatocellular Carcinoma

Lung Cancer: Over the course of the last decade, the treatment of lung cancer has evolved quite rapidly. New scientific and clinical advances have modified the standard of care and led to improved patient outcomes. At the same time, the treatment of lung cancer has become increasingly complex, requiring the comprehensive review and assessment of multiple issues, genetics, radiology, surgery, reconstruction, chemotherapy, and more. As a result the harmony and open communication between these specialties facilitated by a multidisciplinary team approach are crucial in providing the best care to patients and ensuring

successful treatment. Lung Cancer: A Multidisciplinary Approach to Diagnosis and Management, written by a multidisciplinary team of authors representing a range of disciplines, is a valuable resource for physicians, fellows, nurses, physician assistants, physical therapists, and all health care providers involved in the treatment of lung cancer. Lung Cancer: A Multidisciplinary Approach to Diagnosis and Management summarizes the state-of-the-art issues related to the treatment of lung cancer and describes an approach for optimal multidisciplinary care for individuals who have been diagnosed with lung cancer or who are at higher risk to develop lung cancer. About the Series: The Current Multidisciplinary Oncology series edited by Charles R. Thomas consolidates and integrates the varied aspects of multidisciplinary care for major topics in oncology, including breast, lung, prostrate, head and neck and more. The volumes in the Current Multidisciplinary Oncology series will represent all related topic areas, including oncology, radiation oncology, pain, pathology, imaging, psychological support and the primary disease. In addition, each volume includes a chapter focusing on special populations and the disease's impact / difference on them, and discussion of future directions and quality of life issues. In addition each volume has a chapter written by a private practice oncologist. All Current Multidisciplinary Oncology titles provide: Consolidation and integration of the varied aspects of multidisciplinary care for major topics in oncology Coverage of all related topic areas, including medical and surgical oncology, radiation oncology, pain, pathology, imaging, psychological support, and the primary disease A chapter focusing on special populations and the disease's impact / difference on them A chapter on community practice written by a private practice oncologist Discussion of quality-of-life issues

Image Feature Detectors and Descriptors

Abdominal Ultrasound is comprehensively reviewed by guest editor Wui K. Chong and authors. Articles will include: Ultrasound of the Liver and Spleen; Ultrasound of the Gallbladder and Biliary Tree; Doppler US of the Liver, Portal Hypertension, and TIPS; Contrast evaluation of liver masses; Elastography of the Abdomen; The Role of Sonography in Liver Transplantation; Renal Ultrasound; Ultrasound of the Renal Transplant; Sonography of the Retroperitoneum; Ultrasound Assessment of the Aorta and Mesenteric Arteries; Sonography of the Bowel; Ultrasound of the Abdominal Wall; Ultrasound-Guided Intervention in the Abdomen and Pelvis, and more!

Methods of Cancer Diagnosis, Therapy, and Prognosis

Ultrasound continues to be one of the most important diagnostic tools in medicine and is used by a wide range of healthcare professionals across many applications. This book provides a practical, clinically relevant guide for all practitioners working in the field of abdominal ultrasound. Its aim is to enable the operator to maximize the diagnostic information and recognize the limitations of ultrasound scans. Accessible, step-by-step approach Covers the basic related anatomy, technique and ultrasound appearances together with the most common pathological processes Written at a level suitable for both students and practitioners This new edition features: 4-colour figures throughout New chapters on 'Ultrasound in infectious diseases' and 'Safety and musculoskeletal disorders Expanded sections on the bowel, and Contrast agent techniques.

Magnetic Resonance Elastography

The comparison between methods, evaluation of portal hypertension and many other questions are still open issues in liver elastography. New elastographic applications are under evaluation and close to being used in clinical practice. Strain imaging has been incorporated into many disciplines and EFSUMB guidelines are under preparation. More research is necessary for improved evidence for clinical applications in daily practice. The Special Issue published papers on recent advances in development and application of Ultrasound Elastography.

Contrast Media in Ultrasonography

This book provides an up-to-date overview on the clinical value of contrast agents in ultrasound. The volume moves from a background section on technique and methodology to the main sections on the clinical application of contrast ultrasound in the liver and in vascular diseases. A final section discusses results and prospects of contrast ultrasound modality in the other fields.

Contrast-Enhanced Ultrasound in Clinical Practice

Few fields of medicine have witnessed such impressive progress as the diagnosis and treatment of liver tumors. Advances in imaging technology, the development of novel contrast agents, and the introduction of optimized scanning protocols have greatly facilitated the non-invasive detection and characterization of focal liver lesions. Furthermore, image-guided techniques for percutaneous tumor ablation have become an accepted alternative treatment for patients with inoperable liver cancer. This book provides a comprehensive and up-to-date overview of the role of diagnostic and interventional radiology in respect of liver tumors. The volume moves from background sections on methodology and segmental liver anatomy to the main sections on the diagnosis of benign and malignant liver lesions. An integrated approach, focused on the correlation of ultrasound, CT, and MR imaging findings, is presented. Finally, a full section describes the principles, methods, and results of percutaneous tumor ablation techniques.

Abdominal Ultrasound, An Issue of Ultrasound Clinics,

This book offers an image-based, comprehensive quick reference guide that will assist in the interpretation of contrast-enhanced ultrasound (CEUS) examinations of the liver in daily practice. It describes and depicts typical and atypical behavior of both common and less frequently observed focal liver lesions. For each type of lesion, the findings on pre- and post-contrast images are presented and key characteristics are highlighted. Individual chapters also focus on the assessment of response to locoregional and systemic treatment and the impact of European guidelines on CEUS. The Atlas of Contrast-Enhanced Sonography of Focal Liver Lesions will serve as an invaluable hands-on tool for practitioners who need to diagnose liver lesions using CEUS in the major clinical settings: oncology patients, cirrhotic patients, and patients with incidental focal liver lesions.

Diagnosis and Treatment of Hepatocellular Carcinoma

Provides detailed information on diagnostic radiology contributing to the broad field of imaging. Entries are written by leading experts and will provide basic and clinical scientists in academia, practice and industry with valuable information about the field of diagnostic imaging.

Updates in Liver Cancer

Over the last decade, advanced imaging and interventional techniques have greatly improved the treatment of all forms of liver, biliary, and pancreatic disease. They have also transformed hepatobiliary and pancreatic radiology into an increasingly useful and sought-after specialty. Organized by anatomic region, this book is designed to help specialists develop a comprehensive approach to disorders of the liver, pancreas, and biliary tract. Special features include: Detailed instruction in all radiologic techniques, including ultrasound, computed tomography, MRI, angiography, nuclear medicine, ERC, and transhepatic cholangiography Full information on a wide range of hepatobiliary and pancreatic disorders, and the techniques used in their treatment. Complete coverage of interventional procedures Special chapters on the treatment of trauma, postoperative, and pediatric patients Practical and comprehensive, HEPATOBILIARY AND PANCREATIC RADIOLOGY is a must for both newcomers and experienced radiologists!

Hepatobiliary and Pancreatic Radiology

The Consulting Editor of Radiologic Clinics, Frank Miller, presents a comprehensive review of Adult Body MR. Articles will include: body MRI: fast, efficient, and comprehensive; dealing with vascular conundrums with MRI; HCC and other hepatic malignancies: MR imaging; understanding the canvas: diagnosis and problem-solving in diffuse liver disease; gallbladder and biliary (MRCP); MR of kidney and adrenal glands; prostate MR; MR of focal liver masses; MR of pancreas; MR enterography; gadolinium contrast agent selection and optimal use for body MRI; MR angiography and venography of abdomen and pelvis; functional MR imaging; and much more! "I would strongly recommend this book to any radiologist or radiographer with an interest in abdomino-pelvic MRI. It will become a recommended text on the reading list of my Medical Magnetic Resonance Maters Programme." Reviewed by: Paul Bland, Senior Lecture and Postgraduate Diagnostic Radiography Programme Director, City University London, Nov 2014

Spiral CT of the Abdomen

This book provides readers with a selection of high-quality chapters that cover both theoretical concepts and practical applications of image feature detectors and descriptors. It serves as reference for researchers and practitioners by featuring survey chapters and research contributions on image feature detectors and descriptors. Additionally, it emphasizes several keywords in both theoretical and practical aspects of image feature extraction. The keywords include acceleration of feature detection and extraction, hardware implantations, image segmentation,

evolutionary algorithm, ordinal measures, as well as visual speech recognition.