Record Nr. UNINA9910349375303321 Multislice CT / / edited by Konstantin Nikolaou, Fabian Bamberg, **Titolo** Andrea Laghi, Geoffrey D. Rubin Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-319-42586-2 Edizione [4th ed. 2019.] Descrizione fisica 1 online resource (1,116 pages) Collana Diagnostic Imaging Disciplina 616.07572 Soggetti Radiology Cardiology Oncology Diagnostic Radiology Oncology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Techniques -- Multislice CT: Current Technology and Future

Developments -- Dynamic Volume CT with 320-Detector Rows: Technology and Clinical Applications -- 3D Imaging with Flat-Detector C-Arm Systems -- Radiation Exposure and Protection in Multislice CT -- Dual-Energy CT-Technical Background -- Radiation Dose in Multislice Cardiac CT -- Radiation Risks Associated with CT Screening Procedures -- Contrast Agent Application and Protocols -- Neuro / Ear-Nose-Throat -- Cerebral Perfusion CT: Technique and Clinical Applications -- MDCT in Neuro-Vascular Imaging -- Anatomy and Pathology of the Temporal Bone -- Pathologies of the Orbit -- Dental CT: Pathologic Findings in the Teeth and Jaws -- Anatomy and Corresponding Oncological Imaging of the Neck -- Cardiovascular Imaging -- Noninvasive Coronary Artery Imaging -- Technical Innovations in Cardiac and Coronary MSCT -- Assessment of Coronary Artery Stents by Coronary CT Angiography -- Acute Chest Pain -- The Role of Cardiac Computed Tomography in Cardiac Surgery -- New Indications for Cardiac CT -- Complementary Role of Cardiac CT and MRI -- Complementary Roles of Coronary CT and Myocardial Perfusion SPECT -- CTA of the Aorta by MDCT -- CTA of the Spinal Arteries --

Lower-Extremity CTA -- Lung -- Interstitial Lung Diseases -- Pneumonia -- CT of the Airways -- Oncology -- Liver Tumors -- MDCT of Pancreatic Tumors -- Imaging of Colorectal Tumors with Multidetector Row CT -- Urogenital Tumors -- PET–CT in Oncology -- PET and PET–CT in Neuroendocrine Tumors -- Role of MDCT in Bone Tumors, Metastases, and Myeloma -- Dual Energy CT: Initial Description of Clinical Applications in the Abdomen -- Intervention -- CT-Guided Biopsy and Drainage -- Vertebroplasty -- CT-Guided Tumor Ablation -- Rotational C-Arm-Based CT in Diagnostic and Interventional Neuroradiology -- Abdominal Intervention with C-Arm CT -- Trauma Imaging / Acute Care -- CT Management of Multisystem Trauma.

Sommario/riassunto

The fourth edition of this well-received book offers a comprehensive update on recent developments and trends in the clinical and scientific applications of multislice computed tomography. Following an initial section on the most significant current technical aspects and issues. detailed information is provided on a comprehensive range of diagnostic applications. Imaging of the head and neck, the cardiovascular system, the abdomen, and the lungs is covered in depth, describing the application of multislice CT in a variety of tumors and other pathologies. Emerging fields such as pediatric imaging and CTguided interventions are fully addressed, and emergency CT is also covered. Radiation exposure, dual-energy imaging, contrast enhancement, image postprocessing, CT perfusion imaging, and CT angiography all receive close attention. The new edition has been comprehensively revised and complemented by contributions from highly experienced and well-known authors who offer diverse perspectives, highlighting the possibilities offered by the most modern multidetector CT systems. This book will be particularly useful for general users of CT systems who wish to upgrade and enhance not only their machines but also their knowledge.