

Medical Radiology **Diagnostic Imaging**

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Editors

Radiation Dose from Multidetector CT
Second Edition

Computed tomography (CT) is a powerful imaging technology that can provide valuable information with profound implications for patient care and management. Close to 65 million CT examinations are performed each year in the United States alone, an astonishing number achieved with an annual double digit growth rate over the past 30 years. The burgeoning use of CT has resulted in an exponential increase in collective radiation dose to the population. Despite investigations supporting the use of lower radiation doses, surveys highlight the lack of proper understanding of CT parameters that affect radiation dose. Dynamic advances in CT technology also make it important to explain the latest dose-saving strategies in an easy-to-comprehend manner relevant to routine clinical practice.

This book aims to review key aspects of the radiation dose from CT and to provide simple rules and tricks for radiologists and radiographers that will assist in the appropriate use of CT technique. The second edition includes a number of new chapters on the most up-to-date strategies and technologies for radiation dose reduction while updating the outstanding contents of the first edition. Radiation dose perspectives of major CT vendors are also included. In addition, a complementary online image gallery section illustrates effects of radiation dose modification on diagnostic interpretation.

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