

Anne Grethe Jurik

H. D. Nagel: Radiation exposure in computed tomography: fundamentals, influencing parameters, dose assessment, optimisation, scanner data, terminology

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The diagnostic importance of CT as an imaging modality has grown rapidly, but awareness of the often

rather high radiation dose associated with CT is not always taken into account. Therefore, there is an increasing concern about the extent to which CT contributes to the radiation from medical exposure. In most countries there is a deficit in the field of training among radiologists regarding CT dosimetry and risk, in addition to lack of appropriate courses and literature. This book by Nagel et al. is intended to fill the gap by supplying basic information about the dose aspects of CT. The book gives an up-to-date overview of the dosimetric aspects of CT including multislice technique, CT fluoroscopy and tube current modulation. Although all aspects of the complex CT dosimetry are mentioned, most of the book is understandable for non-physicists. Apart from describing the dosimetry, the book includes a chapter about factors influencing the patient dose, which is fundamental knowledge for radiologists performing or

pursuing CT. This chapter includes both equipment-related and application-related dosimetric factors, but unfortunately not information about how to measure the needed diagnostic image quality as stated in the European Guidelines for CT. Included is also a chapter about low-dose CT and the current knowledge about dose values for different CT examinations in addition to reference dose values and description of practical dose measurement. The book is important and should be read by all radiologists performing CT if they are not educated regarding CT dosimetry. For those who would like further information about the layout and the content of the book, a read-only version is available at the publisher's home page (<http://www.cocir.org>).

A. G. Jurik (✉)
Department of Radiology R, Aarhus
Kommunehospital, Noerrebrogade 44,
8000 Aarhus C, Denmark