



Haris Chrysikopoulos: Errors in Imaging

Springer Nature Switzerland AG 2020, ISBN 978-3-030-21103-5

Luigi Mansi¹

Published online: 13 January 2021

© The Author(s), under exclusive licence to Springer-Verlag GmbH, DE part of Springer Nature 2021

This is a peculiar book, because it has been written by a single author, as rarely happens today in the field of scientific publications. Therefore, it could be considered one of the results of a personal history in diagnostic imaging. Haris Chrysikopoulos, born in Greece, but graduated in Medicine and specialized in Radiology in the USA in the first 1990s, returned to his homeland where he is now Director of CT/MRI at the EuroDiagnosis Imaging Center in Corfu. Being a one-man book, this editorial work is the elaboration of an interest in diagnostic errors that matured over the years through discussions with the most important teachers, counterparts, and friends (including the father and a brother) in his professional training. All of them are warmly acknowledged in the forewords.

This is an agile publication of 214 pages, enriched with 122 illustrations, forty-two of which in color. It is organized in the following 7 chapters: (1) Perception and Cognition in Medical Imaging, (2) Definition of Errors in Imaging, (3) Categories of Errors in Imaging, (4) The Radiology Report, (5) Mechanisms of Errors, (6) Expertise and Competence, and (7) Error Reducing Strategies.

As it can be understood, all the possible causes of inaccuracy are taken into account, starting from errors in the subjective evaluation of images, determined by perceptual and cognitive defects, to get to all the other problems such as those of

critical judgment, which inappropriately considers the highlighted data, and the ones of communication. The analysis is based on scientific and cultural criteria which also identify possible ways to avoid future errors. In particular, the role of mistakes deriving not only from a technical cause but also from psychological reasons and bias is described. The didactic structure of the text is significantly helped by the presence of 22 teaching cases, which clearly evidence how easy it is to make mistakes, but at the same time how it is possible to recognize and avoid them. The publication also includes an epilogue, reporting conclusions, and personal thoughts about education (with main reference to diagnostic imaging), and a glossary. All the information is widely supported by extensive and updated references, and further enriched through the suggestion of in-depth readings.

Although the book is centered on computed tomography and magnetic resonance, the general principles are applicable to all the imaging modalities, including the traditional ones and the hybrid machines.

In my opinion, this volume has to be strongly suggested to all the ones interested in diagnostic imaging, whether in training or in practice, including physicians, students, and all the personnel directly or indirectly involved in the field. Furthermore, its evident didactic value may help to increase and improve critical knowledge and teaching skills also for teachers. In other words, this book cannot be missing in the library of a diagnostic imaging department.

✉ Luigi Mansi
mansi.luigi@libero.it

¹ Section Health and Development, Interuniversity Research Center for Sustainability (CIRPS), Naples, Italy

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.