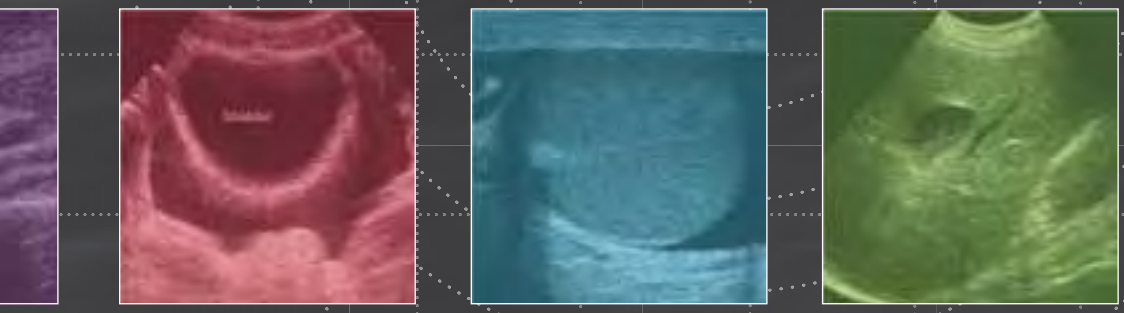
Manual of diagnostic ultrasound

volume 1



Second edition

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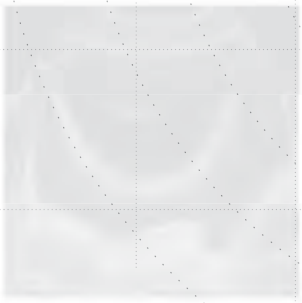

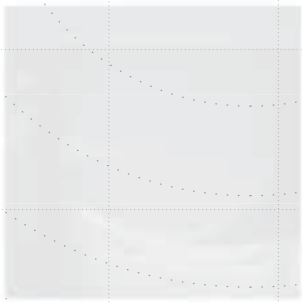

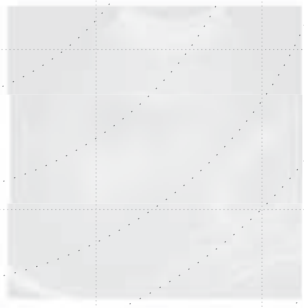

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Contents

Foreword

No medical treatment can or should be considered or given until a proper diagnosis has been established.

For a considerable number of years after Roentgen first described the use of ionizing radiation – at that time called 'X-rays' – for diagnostic imaging in 1895, this remained the only method for visualizing the interior of the body. However, during the second half of the twentieth century new imaging methods, including some based on principles totally different from those of X-rays, were discovered. Ultrasonography was one such method that showed particular potential and greater benefit than X-ray-based imaging.

During the last decade of the twentieth century, use of ultrasonography became increasingly common in medical practice and hospitals around the world, and several scientific publications reported the benefit and even the superiority of ultrasonography over commonly used X-ray techniques, resulting in significant changes in diagnostic imaging procedures.

With increasing use of ultrasonography in medical settings, the need for education and training became clear. Unlike the situation for X-ray-based modalities, no international and few national requirements or recommendations exist for the use of ultrasonography in medical practice. Consequently, fears of 'malpractice' due to insufficient education and training soon arose.

WHO took up this challenge and in 1995 published its first training manual in ultrasonography. The expectations of and the need for such a manual were found to be overwhelming. Thousands of copies have been distributed worldwide, and the manual has been translated into several languages. Soon, however, rapid developments and improvements in equipment and indications for the extension of medical ultrasonography into therapy indicated the need for a totally new ultrasonography manual.

The present manual is the first of two volumes. Volume 2 includes paediatric examinations and gynaecology and musculoskeletal examination and treatment. As editors, both volumes have two of the world's most distinguished experts in ultrasonography: Professor Harald Lutz and Professor Elisabetta Buscarini. Both have worked intensively with clinical ultrasonography for years, in addition to conducting practical training courses all over the world. They are also distinguished representatives of the World Federation for Ultrasound in Medicine and Biology and the Mediterranean and African Society of Ultrasound.

We are convinced that the new publications, which cover modern diagnostic and therapeutic ultrasonography extensively, will benefit and inspire medical professionals in improving 'health for all' in both developed and developing countries.

Harald Østensen,
Cluny, France

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