

# Foreword

Ultrasonography has gained acceptance throughout the world. In most countries in continental Europe, ultrasonography is practiced by clinicians—in contrast to the UK and the USA. The diagnostic accuracy of conventional abdominal ultrasound has markedly improved with the use of color and contrast enhancement. Endoscopic ultrasound (EUS) has become extremely important for detecting lesions in various organs and for cancer staging. Miniprobes, which are available in many endoscopy units, make it possible to assess extremely small lesions in the vicinity of the endoscope.

Christoph F Dietrich is the author and editor of several books on ultrasonography, including EUS, published in German, which have met with an enthusiastic response among German gastroenterologists and endoscopists. He has now collaborated with a group of European gastroenterologists and endoscopists in preparing the present volume in English, covering the specific field of EUS. I feel sure the book will be as successful in Europe

as his best-selling books on conventional and contrast ultrasonography have been in German.

The book is well-structured, taking a practical clinical approach and providing tips and tricks and a large number of excellent illustrations. It covers many specialized aspects of EUS, such as three-dimensional linear EUS, sonoelastography, EUS-guided biopsy, miniprobes, EUS-guided neurolysis of the celiac plexus, laparoscopic ultrasound scanning, and EUS-guided endosurgery.

The authors are experts in EUS from all over Europe. I have already learned a great deal from the book for my own everyday work and am convinced that readers will be able to improve their knowledge and skills in EUS with this excellent volume.

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# Preface

Endoscopic ultrasound (EUS) was originally used to examine the walls of the upper and lower gastrointestinal tract, as well as nearby organs such as the pancreas. EUS can accurately determine how deeply a tumor has penetrated through the bowel wall—especially with miniprobes, which are mainly used in the upper gastrointestinal tract. Endoanal ultrasonography and endorectal ultrasonography are important in the staging of anal and rectal cancer and for identifying recurrent neoplasia after surgery, as well as for assessing the anatomic integrity of the anal sphincters in inflammatory and neoplastic diseases.

Examining the size, shape, and ultrasound appearance of adjacent lymph nodes is also helpful for determining whether cancer has spread. EUS is becoming more and more important in assessing a wide range of gastrointestinal diseases. Specifically, EUS has been used to detect small pancreatic tumors less than 20 mm in size when other imaging methods are unable to provide a diagnosis. As the technique can only be carried out by examiners with a high level of anatomical knowledge, accomplishment, and skill, EUS is now widely regarded as the central discipline in endoscopy.

Initial enthusiasm over the diagnostic results obtained with 360° cross-sectional radial scanning has settled to a more realistic level, particularly since the advent of computed tomography and magnetic resonance imaging. In combination with fine-needle aspiration using curved linear-array instruments, and with the use of Doppler and pulsed-Doppler ultrasound, EUS is finally becoming a state-of-the-art, minimally invasive alternative to exploratory surgery in many situations—

not only for diagnostic but also for therapeutic purposes. This is true not only for the upper and lower gastrointestinal walls, where EUS is still the imaging method of choice, but also for the pancreas, bile duct, gallbladder, adrenal glands, and mediastinum when other tests are inconclusive and to determine the extent of certain cancers of the digestive tract and lungs.

EUS is increasingly moving beyond being a mere imaging tool for diagnostic purposes to become an interventional procedure for accurate, cost-effective, and non-surgical assessment and management of many diseases—e.g., to guide pseudocyst drainage, celiac plexus neurolysis, and other more exciting indications.

This textbook and atlas has been written by a group of gastroenterologists and surgeons who not only share an enthusiasm for EUS but are also aware of the importance of passing on the basics of the method, as well as tips and tricks, for educational purposes. The book has been written not only to encourage and allow the practice of EUS in everyday routine work, but also to present the diagnostic and therapeutic algorithm. The book is therefore intended not only for endoscopists and ultrasonographers, but also to provide information for the medical profession in general.

I would like to cordially thank all those who have contributed to the book, including those who are not directly mentioned in the text, such as Dr. Cliff Bergman, Stefanie Langner, and Annie Hollins of Thieme Medical Publishers, as well as Muriel Vouzelaud for her strong support for the project.

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