

# Foreword

A large cross-section of the world's great and good in colorectal surgery have been enticed, inveigled, I suspect at times brow-beaten, to produce this *tour de force*. The editors, themselves famous for their own extensive contributions in this area, must be congratulated for their fine achievements.

Every card-carrying specialist needs a reference book of this sort. My own are well worn by many years' reference, for when confronted by big problems, big issues, senior clinicians must be able to lay their hands on a well-thumbed old favourite: not a small, "where are we now" sort of book, or an exam crammer, but on one that is large, sedate and of "traditional build."

Rather than being a supergiant covering all of colorectal surgery, this book has focused on the broad structural investigation of the anorectum and on the focused management of largely "functional" problems. And it has done so in style. For this is a core area of specialist practice; your more general colleagues may think twice before referring you new cases of cancer and inflammatory bowel disease (both also central areas in colorectal surgery), but they will not hesitate in referring the patients whose investigation and management are described here. And they will expect you to know how to deal with them.

These are some of the most challenging patients to manage. Rightly have the editors covered the physiological areas, rightly the psychological issues, rightly the medicolegal aspects: here is the making of a specialist—the sword and the shield.

Robin Phillips  
St Mark's Hospital  
Harrow, Middlesex

# Preface

The recent profusion of colorectal and anal surgical techniques and investigative procedures has made it comparatively difficult for both the general surgeon with a colorectal interest and the specialist coloproctologist to keep up with the body of new literature and the regular appearance of new surgical procedures. The introduction of capital-intensive imaging modalities discussed in this book (including endoanal ultrasonography, 3-dimensional reconstructed axial anal sonography, thin-slice high spatial-resolution magnetic resonance imaging and endoanal MR imaging), has rendered the management and research of some complex anorectal disorders within the purview of a few specialized colorectal centers. Balanced against this, the standardization of rectal cancer resection has shown that workshop practices can readily be translated into noncolorectal environments and has highlighted the improvement in cancer-specific outcomes for specialists trained specifically in these techniques. We felt that this book was timely to condense these complex disorders into a workable format for the colorectal clinician.

This book is divided into two main sections. Section 1 discusses the investigative aspects of specialist proctological practice with heavy emphasis on the complex physiology of the region in health and disease. The abundance of literature here makes the subject somewhat difficult to comprehend for the busy colorectal surgeon and the aim is to précis relevant physiology which defines anorectal pathology and which may be clinically useful in referrals to a tertiary practice. Here, there is detailed discussion of conventional (and vectorvolume) anorectal manometry, the nuances of rectoanal inhibition (and its clinical significance), the research role of ambulatory anorectal manometry, mucosal electrosensitivity, and the new field of impedance planimetry. The complex subject of rectal biomechanics is deliberately highlighted in an effort to show the pitfalls (and meaning) of simple rectal compliance measurement. The selected use of colonic (and rectal) transit assessment in the patient presenting with intractable constipation and evacuatory difficulty is discussed along with the ever diminishing place (in view of endoanal sonography), of electromyography and other neurophysiologic testing.

Here too, there is discussion of the expanded role of endoanal sonography and its extensions, (namely 3-dimensional reconstructed axial endosonography and dynamic transperineal sonography), along with an outline of defecography as it is clinically used in two different European centers. The importance in functional disorders of dynamic sequence MR imaging and its endoanal counterpart is included for the assessment of patients with pelvic floor disorders along with the place of surface pelvic phased-array MR imaging which has become the “gold standard” for selected use in recurrent and specific perirectal sepsis and for the pre-operative determination of rectal cancer stage. In the latter circumstance, accurate staging before surgery defines those patients who will benefit from definitive downstaging neoadjuvant chemoradiation and those likely to benefit in terms of reduced locoregional recurrence and enhanced cancer-specific survival from pre- and postoperative adjuvant radiotherapy.

This section continues with an extensive discussion of internal anal sphincter neurotransmission and pharmacology; a burgeoning field for the topical therapy of passive fecal incontinence and chronic anal fissure. Finally there is consideration of the specialized histopathology of the anus and anal canal and the newer area of cytology and “high-resolution anoscopy” of the region; an important field with limited longitudinal data for human papillomavirus (HPV) -associated preinvasive anal intraepithelial neoplasia. This latter disease is becoming increasingly recognized in the HIV-positive population and in other immunosuppressed patients.

Section 2 assesses the specific management decisions of importance in particular proctological practice, as recommended from many renowned units throughout the world dedicated to complex anorectal disorders. It begins with an overview of the surgical approach towards patients presenting with intractable constipation, examining the importance of paradoxical puborectalis contraction and its management, colectomy, biofeedback therapies and the coloproctological approach to symptomatic rectocele. Fecal incontinence is broadly reviewed along with its prevention, surgical management, biofeedback strategies, quality of life considerations and the place of new operative procedures including dynamic electrically-stimulated graciloplasty, artificial anal sphincter replacement (either as a primary procedure or in total anorectal reconstruction) and the exciting developments in sacral neuromodulation.

The gynecological perspective of patients with complex postoperative evacuatory dysfunction, rectocele and enterocele and mixed fecal and urinary incontinence, is covered as well as the technical clinical problems encountered after failed sphincteroplasty, graciloplasty, artificial bowel sphincter deployment and following construction of a neorectal reservoir. When patients present with functional problems following these surgeries, management is particularly difficult and renowned units present their experience in this book of these discrete specialized problems. There is discussion of the functional problems encountered in patients with

particular neurological disorders as well as consideration of the specific psychological problems in patients with defecation difficulty along with the psychologist's approach and integration within the dedicated colorectal unit. Finally, our authors outline the "nuts and bolts" of setting up an anorectal laboratory and the medicolegal issues entailed in the assessment and management of these complex patients; many of whom present after failed surgeries and treatments. It is hoped that this textbook will serve as a useful resource reference for the busy coloproctologist faced with a range of complicated and challenging patients who present with complex proctological disorders.

The production of our textbook could not have been possible without the unwavering assistance of Elektra McDermott whose constant cajoling of authors to complete their chapters on time was the difference between whether the product would be finished or simply just remain on the drawing board. Both Melissa Morton and Eva Senior of the medical editorial staff of Springer in London were also essential for the project to come to fruition and their tireless efforts, organization and energy made the task an editor's joy.

Steven D. Wexner, MD  
Andrew P. Zbar, MD  
Mario Pescatori, MD