Fecal Incontinence

Diagnosis and Treatment

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Forewords by
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Foreword

by Ann C. Lowry

Several years ago, the American media presented urinary incontinence as the "last closet issue". Arguably, that designation really belongs to fecal incontinence. Even today, only a third of patients suffering with the condition discuss it with their physicians. This is particularly unfortunate, as the condition affects a significant portion of the population and is a significant burden to patients, their families, and society.

This situation exists for a number of reasons. The social stigma of incontinence of stool is the primary reason. Early on, children are taught to avoid "bathroom talk", and that admonishment continues into adulthood. However, there are other reasons as well. Continence of flatus and stool is an extremely complex process involving feces consistency and transit time, the sensory capability of the rectum, and the neurological and muscular function of the sphincter muscle. Despite years of research on the pathophysiology, it is hard to explain how a patient with an intact sphincter has daily episodes of incontinence while a patient with a cloaca has none. Inconsistent presentations of the condition make it baffling to health care providers. Partially because of the complexity of the condition, a number of different providers are interested in fecal incontinence. Each specialty focuses upon a different aspect of the disorder. For instance, pediatricians focus largely on congenital abnormalities associated with incontinence and treatment options applicable to children. Gerontologists concern themselves with the opposite age spectrum, where the etiology and appropriate treatment options are different. In most institutions, there is little communication among specialties about the disorder, which limits progress in diagnosis and treatment. Finally, incontinence is not a life-threatening process; there is thus less pressure to overcome the natural tendency of patients and providers to avoid discussing the situation.

In view of all of the above, this book, *Fecal Incontinence: Diagnosis and Treatment,* is a significant contribution to the medical profession. Discussion of all aspects of incontinence is presented in a clear, concise manner. The contributors represent distinguished experts from multiple disciplines and continents; these authors are the leaders and innovators in their fields. The book is especially timely, as understanding of the disorder and treatment options have progressed significantly within the past few years.

In this one volume, the reader will find information about all elements of the incontinence of stool, starting with the current understanding of continence and the pathophysiology of incontinence. The burden of the illness on patients and their families, including its economic and psychological consequences, is empathetically covered. Appropriate diagnosis and evaluation is thoroughly reviewed. Traditional medical and surgical treatment alternatives as well as innovative treatment options and their outcomes

are critically analyzed. Following that section, specific conditions and their currently recommended management are presented. Hours of library research would be required to obtain equivalent knowledge.

Armed with this information about the impact on patients and available treatment options, providers hopefully will be more likely to ask patients about the symptom. That opens the possibility of more evaluation and treatment, which should reduce the burden on patients and their families. The editors and contributors are to be congratulated for this excellent presentation of their consolidated knowledge.

Minneapolis, April 2007

Ann C. Lowry, MD, FASCRS, FACS
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Foreword

by Lars Påhlman

Faecal incontinence (FI) has been evaluated and treated for many years. Awareness of its incidence, particularly among women, has seen enormous changes over the last two to three decades and research into and the understanding of FI has improved during the same time period. This is a rapidly developing area of expertise in which different surgical techniques have been challenged and new ones have been approached, mainly based upon the understanding of the problem. In this volume edited by Drs. Ratto and Doglietto, the entire spectra within the field of incontinence are covered. Moreover, most of the expertise gained in the new century is expressed in this volume, placing a quality stamp on most of the chapters.

Section I, regarding structure and function in continence and incontinence, is very instrumental and easily read. Even for those with minor knowledge about pathophysiology, this part of the book is important and not difficult to understand.

Section II, how to diagnose FI, provides a more "hands-off" description of how to address patients with incontinence. Numerous different tests are described, and one can argue whether or not the entire spectrum of investigation should be used when diagnosing FI. Again, this volume evaluates the important aspects of the diagnostic procedure, and its place in clinical practice is established.

Regarding Section III, the treatment section, enormous developments have occurred over the last 10–15 years. Important options such as biofeedback and normal care are well evaluated and described here. Moreover, the more or less simple reconstruction with an overlap repair to the more sophisticated treatment options after sphincter-damaging injuries, such as dynamic graciloplasty and artificial bowel sphincter, are described, although the place for those rather advanced techniques is yet to be defined. The latest treatment option, sacral nerve stimulation, is also elegantly discussed. Bulking agents is a totally new area in which advanced techniques have yet to be employed. This developing area is difficult to evaluate, and evidence determining how to best use it is still lacking.

The optimal ways in which to use the entire list of treatment options in FI is difficult to establish, and an algorithm taking the readers through all the different options, with their pros and cons, is important but is actually omitted from this book. After descriptions of different treatment options, entities in which bowel function can be altered in terms of incontinence are presented and clearly described in Section IV. This makes the entire volume more valuable, and it is possible for readers to ascertain essential knowledge, particularly regarding how to use the different treatment options according to a patient's history.

In summary, this is a very well-written and well-presented book about FI that addresses the different aspects on how to diagnose the problem, how to treat it, and what diseases lie behind the treatment options. The future in diagnosing and treating FI is demanding, as the incidence of FI is probably underreported; thus, many patients are suffering in silence. Once new techniques for diagnosing and treating those patients is readily available, demands for such treatment will increase enormously, as will the consequent advantages to society.

Uppsala, April 2007

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Foreword

by Giovanni Romano

There are very few topics in the field of coloproctology like faecal incontinence for which such an impressive progress in understanding pathophysiology and treatment has been achieved in recent years. This opinion, derived from the comparison between my previous book published in 2000 on *Diagnosis and Treatment of Faecal Incontinence* and this book, is confirmed by the significant changing attitudes of outstanding researchers all over the world towards modern treatment of the disorder. Whereas a few years ago aggressive surgical treatment was advised not only for patients with proven postobstetric or traumatic sphincter defects but also for neurogenic faecal incontinence, today, more conservative measures are indicated as a consequence of the very good results reported with advanced rehabilitation techniques and sacral neuromodulation.

It is becoming clear that the promising results first enthusiastically reported after complex surgical operations such as sphincteroplasty, dynamic graciloplasty or artificial bowel sphincters inevitably deteriorate with longer follow-up. This is not unusual whenever surgery is applied to "functional" disorders, and many examples come to mind: the Nissen operation for gastroesophageal reflux or, in the field of coloproctology, postanal repair for idiopathic faecal incontinence. Nevertheless, it seems a hard lesson to learn, even today: surgery is advocated as an absolute indication in the treatment of a number of functional diseases and many authors claim 100% positive results, which in my opinion does not make sense. An outstanding merit of this book is that it stresses the complexity of the disorder and invites physicians to be cautious about proposing distressing operations without proper assessment and indication.

On the other hand, appropriate surgery with skilled operative technique still has an important role in the management of specific conditions. Immediate sphincter repair due to postdelivery injury, or even late repair, by experienced colorectal surgeons has a very good outcome in about 60% of cases, which is relatively good for a "low-tech", "low-cost" technique. Attention to surgical details has too often been neglected in recent times, although it has been proven without doubt that the surgeon is the most important independent variable when assessing results of any surgical operation. This simple concept is appropriately outlined in many chapters of the book.

Another issue emerging from the literature and from congressional debates is the need for cooperation between pelvic floor specialists. It is a fact that when the patient is assessed and operated by the gynaecologist and the urologist in collaboration, the treatment results show a much better outcome. This attitude is well illustrated in specific sections of the book, thus contributing to a future in which pelvic floor units will be established in any specialised institution.

If quality of treatment has undoubtedly improved, the emerging problem is the cost of the cures: new technology is very expensive, and even when its use is appropriate, its widespread use must be balanced with the socioeconomic impact that follows. Distribution of financial resources is crucial for the survival of a modern society, and it is a duty of the scientific community to provide the political authority with a proper assessment of the cost–benefit ratio for any kind of therapy. This topic is specifically addressed in one chapter and is often referred to in many other chapters of the book.

Finally, I was impressed by what I dare to call the "leading philosophy" of this book: the patient is not in the background but at centre stage. Too often in the past, assessment of result has been surgeon oriented, with an underestimation of patients' real needs. The introduction of quality of life scores, although difficult to use in clinical practice and sometimes questionable, has definitely changed this attitude. Great effort has been made by the editors to give this issue the importance it deserves, and this effort in time will undoubtedly improve treatment quality.

There is no question that this book represents a great contribution for young and even experienced colorectal surgeons willing to deal with such difficult patients. One only needs to read the general index and the names of the authors who have written the chapters or the invited commentaries to understand the truth of this statement.

As president of the Italian Society of Colorectal Surgeons (SICCR), I can only congratulate Carlo Ratto–whom I have known for many years and who is current secretary of the SICCR–and Giovanni B. Doglietto for their splendid work. The entire Italian scientific community has reason to be proud that such outstanding personalities from all over the world were willing to contribute to this book, thus showing interest and respect for the work of so many Italian surgeons and researchers.

Avellino, March 2007

Giovanni Romano, MD
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Preface

by Carlo Ratto, Giovanni B. Doglietto

Fecal incontinence (FI) is a frequent, distressing condition that has a devastating impact on patients' lives. However, patients are typically embarrassed and reluctant to acknowledge this disability, so they relinquish the possibility of being cured and remain socially isolated. They become housebound and prefer to pass the day very close to the toilet to avoid losing feces. The exact incidence of FI is uncertain because of patients' hesitation to seek help from their physicians. Most epidemiological studies suggest a prevalence as high as 2% of the general population, but when an interview specifically in relation to FI is conducted, this rate is usually significantly higher. Women seem to be at higher risk, mostly due to obstetric damage to the anal sphincters; however, during the last decade, an increasing interest has been dedicated to those forms of FI related to nontraumatic factors, which reach a relevant incidence. Older subjects are at very high risk, especially those with disabilities and those who are institutionalized. Moreover, young people are often affected. These factors create a significant economic impact for society, not only due to direct and indirect costs, but also due to intangible costs.

FI may result from a variety of pathophysiological situations, and various risk factors can cause a wide range of inability to control feces passage. Therefore, an accurate diagnostic workup of each patient is fundamental. Although not fully agreed upon by all physicians, a multimodal diagnosis, using a multiparametric evaluation, seems to allow the most thorough understanding of FI pathophysiology and to indicate optimal treatment. These are really the most important and challenging aspects of FI management. Indeed, a wide range of therapeutic options is available, including conservative, rehabilitative, and surgical procedures.

The aim of surgery may be to correct a defect or to improve a dysfunction in continence control while the sphincter complex is intact, or it may be to replace a largely fragmented or nonfunctioning sphincter. Making the correct choice is pivotal to the successful management of this condition. Although a number of reports are available regarding results of different surgical procedures, the lack of sufficient evidence from randomized controlled studies makes choosing the type of surgery very difficult. This has been confirmed in the very recent Cochrane Review: all randomized or quasirandomized trials of surgery in the management of adult FI (other than surgery for rectal prolapse) were analyzed, and nine trials were selected with a total sample size of 264 participants. The authors concluded: "it was impossible to identify or refute clinically important differences between the alternative surgical procedures. Larger rigorous trials are still needed. However, it should be recognised that the optimal treatment regime may be a complex combination of various surgical and non-surgical therapies" [Brown S, Nelson R (2007) Surgery for faecal incontinence in adults. Cochrane Database Syst Rev 2:CD001757].

This book is aimed at all physicians involved in the assessment and treatment of FI. Its main purpose is to review the latest advances in the epidemiologic, socioeconomic, psychologic, diagnostic, and therapeutic aspects of FI in order to establish guidelines for effective treatment. We hope this book may help physicians to relieve or solve FI in the many individuals suffering from this disabling condition and, through their positive results, encourage other incontinent people to receive effective treatment.

Rome, April 2007

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