
Introduction

Pelvic floor disorders in which colorectal surgeons are usually interested are conditions causing constipation due to pelvic outlet obstruction: nonrelaxation or paradoxical contraction of the puborectalis, rectoceles, enterocele/sigmoidoceles, rectal intussusception/prolapse, solitary rectal ulcer syndrome (SRUS), descending perineum syndrome, etc., or fecal incontinence (*Lee, 2007*).

Female pelvic floor disorders are a wide variety of clinical conditions, including urinary incontinence, fecal incontinence, pelvic organ prolapse, sensory and emptying abnormalities of the lower urinary tract, and defecatory dysfunction. The most prevalent syndromes (urinary incontinence, fecal incontinence and pelvic organ prolapse) afflict women three to seven times more often than men (*Weber et al., 2001*).

Disorders of the posterior pelvic floor include rectal prolapse, rectocele, and perineal hernia. All of these are associated with disturbances in the integrity of the pelvic floor musculature and disordered defecation (*Berman et al., 2005*).

Disorders of the pelvic floor are a relatively common entity plaguing mainly older women but possible in patients of any age and either gender. They may occur more in patients with a history of pelvic trauma related to childbirth, and patients with psychiatric diagnosis also have a predisposition. Patients can present with constipation, incontinence, or a combination of both. These symptoms can be etiologic factors in the

development of pelvic floor disorders and/or manifestations of the disorder itself. There are a number of imaging modalities that can be useful in working up these patients, which may provide anatomical and functional information to be interpreted in light of the clinical picture as whole in order to make a diagnosis. Both conventional snapshot imaging and dynamic imaging have an important role in defining the disease process. In terms of therapy, surgery may be an option if there is an anatomical defect to be repaired, such as in rectal prolapse, rectocele, and perineal hernia. Biofeedback alone can be very successful in facilitating the process of relearning defecation in patients with pelvic floor dyssynergia and may be used as an adjunct to surgery in rectal prolapse. A combined approach, utilizing multiple diagnostic tests and approaches to therapy, is most appropriate in managing this complex and often cryptic set of disorders (*Berman et al., 2005*).

Evaluation of patients with pelvic floor complaints begins with a thorough history and physical examination, but the degree and presence of pelvic organ prolapse may not always be apparent on clinical examination. Furthermore, surgical correction of pelvic floor disorders is a common treatment plan, and accurate preoperative assessment of the entire pelvis is important to guide an optimal surgical repair in an effort to avoid the need for repeat surgery. Therefore, many patients benefit from further assessment with adjunctive tests, including imaging. There are a variety of options for imaging these patients including ultrasound, fluoroscopy, and MRI examinations (*Woodfield, 2010*).

Pelvic organ prolapse (POP) has classically been treated with standard surgical approaches, using midline plication for anterior and posterior compartmental defects and either abdominal or laparoscopic sacrocolpopexy or sacrospinus fixation for apical prolapse. Magnetic resonance imaging has contributed to the understanding of anatomical defects so that lateral defects along the line of the arcus tendinious can now be detected, altering the approach to repairs in some cases. Synthetic meshes and biological grafts have been introduced along with numerous materials and implementation procedures, but their use has not been backed up by randomized controlled trial (RCT) data. Research into the use of synthetic meshes often takes the form of small observational or retrospective studies or case series, often with a short follow-up and numerous confounding variables (*Pitkin, 2009*).

The obstructed defecation syndrome affects about 7% of the adult population and this clinical disorder conditions the lives of patients who are forced to spend an exhausting time trying to defecate. The surgical intervention recommended for those symptomatic patients who do not obtain satisfactory results from conservative and rehabilitation treatment should be preceded by an accurate pelvi-perineal, clinical and instrumental study. Excellent results, with 92% symptom resolution after rectocele surgical repair, by adopting three selection parameters: (1) a defecography test showing the retention of contrast medium in the rectocele pocket; (2) evidence of

prolapse of the anterior wall of the rectum with rectocele; (3) feeling of vaginal tension with defecation. The transanal access has recently been used to carry out a rectal transanal resection using a double- transanal 33-mm circular stapler (STARR) (*Di Visconte et al., 2006*).

The use of two mechanical staplers contributes to increase intervention costs, thus raising questions for surgeons and Health Authority administrators with regard to its expense. Decided to carry out a cost revenue analysis in order to evaluate the economic aspect of surgical treatment of obstructed defecation syndrome by comparing the costs, revenues and learnings of a number of procedures involving abdominal, perineal and transanal surgical techniques are using a double circular stapler (*Di Visconte et al., 2006*).

Laparoscopic prosthetic reconstruction of the pelvic floor is a therapeutic option that has not yet been adopted frequently, but it certainly is very promising if one thinks of integrating it with robotics in order to achieve greater reproducibility of the longest and most difficult phases of the operation (*Genovese and Leanza, 2006*).