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Functional bowel and anorectal disorders in patients with pelvic organ prolapse and incontinence

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Objective: The purpose of this study was 1) to determine the prevalence of functional bowel and anorectal disorders as defined by the Rome II criteria in patients with advanced pelvic organ prolapse (POP) and urinary incontinence (UI), and (2) to determine if the extent of prolapse on gynecologic examination is related to the subtypes of constipation or any functional anorectal pain disorder.

Study design: Three hundred and two consecutive female subjects presenting to a tertiary urogynecology clinic were enrolled. Demographic, general medical, and physical examination information, including POPQ measurements and a standardized sacral neurologic evaluation, were collected. The prevalence of functional disorders of the bowel, rectum, and anus as defined by the Rome II criteria were collected using the Rome II Modular questionnaire. Relationships of functional disorders to various components of the vaginal examination were reviewed.

Results: Thirty-six percent (108/302) met the criteria for constipation, including the following subtypes: 19% outlet constipation, 5% functional constipation, 5% constipation predominant irritable bowel syndrome (IBS), and 7% IBS-outlet. Nineteen percent (56/302) of subjects had IBS or 1 of its subtypes. Functional diarrhea was seen in 6% (17/302), fecal incontinence in 19% (58/302), and anorectal pain disorders in 25% (77/302). After controlling for age, parity, diabetes, constipating medications, and previous pelvic surgery, there were no differences in the prevalence of constipation or any of its subtypes between patients with UI and those with stage 3 or 4 POP. Fecal incontinence was independently associated with UI (adjusted odds ratio [OR] 6.3; 95% CI 2.6–19.1), but not advanced POP. Neither overall stage of POP nor stage of posterior vaginal prolapse was significantly associated with any of the functional bowel disorders, including constipation and its subtypes. Perineal body measurement was significantly longer in patients with outlet type constipation (mean 3.5 $\pm$ 0.6 cm vs 3.1 $\pm$ 0.9 cm, $P < .01$) and in those with proctalgia fugax (mean 3.4 $\pm$ 1.0 vs 3.1 $\pm$ 0.8, $P < .05$).

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Conclusion: There is a high prevalence of constipation and anorectal pain disorders in women with urinary incontinence and pelvic organ prolapse. However, patients with stage 3 or 4 pelvic organ prolapse have similar rates of constipation compared with those with urinary incontinence. Constipation and its subtypes are not related to the stage of pelvic organ prolapse. It appears that either constipation is not a significant contributor to prolapse, or constipation contributes equally to the development of both urinary incontinence and pelvic organ prolapse.

Symptoms of constipation are commonly reported in patients with pelvic floor disorders, particularly posterior vaginal prolapse. These include excessive straining, a need to splint or push on the vagina or perineum to complete a bowel movement, and the trapping of stool upon evacuation. The ability to predict which patients will have an improvement in such symptoms after surgical repair requires an understanding of anatomy and pathophysiology of disorders of the bowel, rectum, and anus. There is a paucity of literature evaluating these disorders in gynecologic populations. Furthermore, disorders that are commonly encountered in clinical practice, such as functional diarrhea, proctalgia fugax, levator ani syndrome, and pelvic floor dyssynergia, are frequently ignored in gynecologic clinical practice and research.

The Rome II criteria are a set of consensus agreed upon criteria to describe disorders of the bowel, rectum, and anus used by our gastroenterology and colorectal colleagues.[1] These criteria have been established to standardize communication regarding disorders of the bowel, rectum, and anus. To our knowledge, these definitions and their relationships have not been described in subjects presenting with prolapse or incontinence. By using standardized terminology regarding these disorders, we may have a better understanding of the disorders, their effects on pathophysiology, and the treatment of pelvic floor disorders.

We sought to determine the prevalence of functional bowel, rectal, and anal disorders in women with urinary incontinence (UI) and pelvic organ prolapse (POP) using the definitions set forth in the Rome II criteria.[1] Because the overwhelming majority of gynecologic literature reports on the relationship between constipation and pelvic organ prolapse, we attempted to determine the prevalence of subtypes of constipation in this population. Our hypotheses were that: 1) patients with pelvic organ prolapse and urinary incontinence would have a higher overall prevalence of constipation compared with the US population; 2) the predominate subtype in our population would be attributed to the outlet subtype[2]; and 3) the degree of prolapse would be higher in subjects with constipation, particularly those with the outlet subtype.

Material and methods

This study was approved by the Cleveland Clinic Foundation Institutional Review Board. This was a cross-sectional study design. Three hundred and two consecutive female subjects presenting to a tertiary referral, urogynecology clinic were prospectively recruited between December 2003 and July 2004. Subjects were eligible for recruitment if the reason for consultation was either pelvic organ prolapse or lower urinary tract symptoms, including urinary incontinence. Exclusion criteria included age less than 18, refusal of the patient to participate, inability to complete the questionnaire, and inability to speak or read English. All 302 potential subjects agreed to participate. Subjects were given a routine questionnaire in the waiting room before being seen by the nurse or physician. Demographic, general medical, and physical exam information were collected. Subjects were classified as having any urinary incontinence by subjective response. Examiners were blinded to results from the bowel questionnaire. Each subject underwent a standardized evaluation, including assessment of prolapse using the POPQ staging system in the lithotomy position.[3] A screening sacral neurologic examination was performed, including testing for anal and bulbocavernosus reflexes, testing for ability to discriminate sharp and dull sensation to perineal pinprick, subjective rating of squeeze anal sphincter tone, and a modified pelvic muscle rating as outlined by Worth et al.[4] The pelvic or circumvaginal muscle rating scale, which assesses the patient's ability to contract the muscles of the pelvic floor with the examiner's fingers in the vagina, subjectively evaluates strength and duration of the contraction.[4]

The prevalence of functional bowel and anorectal disorders as defined by the Rome II criteria were determined by the subject's responses to the Rome II Modular questionnaire, a symptom-based questionnaire developed by clinical consensus.[1] Functional bowel disorders included: 1) irritable bowel syndrome (IBS) and its subtypes: diarrhea predominant, constipation predominant, and IBS-outlet type; 2) functional constipation; and 3) functional diarrhea. Subjects were defined as having outlet type constipation if subjects met both the criteria for functional constipation and had 1 or more of the following outlet symptoms at least 25% of the time during bowel movements over the past 3 months: 1) a sensation that the stool cannot be passed (ie, blocked) when having a bowel movement; 2) a need to press on or around your bottom or vagina to try to remove stool in order to complete the bowel movement;

or 3) having difficulty relaxing or letting go to allow the stool to come out at least one quarter of the time. IBS-outlet type constipation was defined as subjects who met both the criteria for IBS and had 1 or more of the aforementioned outlet symptoms. Subjects who met the criteria for functional type were only classified in this group if they did not meet the criteria for IBS, outlet, or IBS-outlet type.[2] Overall, constipation was grouped together with subjects who met criteria for the mutually exclusive subgroups: 1) functional constipation; 2) functional constipation with outlet delay or obstruction; 3) constipation predominant IBS; and 4) IBS-outlet type.

Functional disorders of the anus and rectum included functional fecal incontinence (and its subtypes of soiling and gross incontinence), and functional anorectal pain (including levator ani syndrome, proctalgia fugax, and pelvic floor dyssynergia). Incontinence of flatus was not assessed because it is not recognized by the Rome II criteria as a disorder. Rome II defines proctalgia fugax as having more than 1 episode of aching pain or pressure in the anal canal or rectum over the last year that lasts from seconds to minutes and disappears completely. Levator ani syndrome includes the same pain; however, the pain can last more than 20 minutes up to several days or longer and has occurrred frequently or continuously in the last 3 months.[1]

Univariate analysis was conducted using the Pearson χ^2 statistic or Fisher exact test for categorical data, the Student t test for continuous parametric data, and the Wilcoxon rank sum test for continuous nonparametric data. Multiple logistic regression analysis was performed to identify factors associated with functional bowel and anorectal disorders, including constipation and its subtypes. Data are reported using odds ratios (OR) and 95% CI. All statistical tests were 2-tailed and $P < .05$ was considered statistically significant. Statistical analysis was performed using JMP 5.0.1 (SAS Institute, Cary, NC).

Results

Table I summarizes the demographics in the sample population. This was a healthy, multiparous population with a mean age of 60 ± 14 years. Forty-one percent (123/302) had a previous hysterectomy, and previous surgery for prolapse was reported in 21% (62/302) of subjects. Overall, 13% (39/302) of subjects had stage 3 or 4 POP without urinary incontinence, 50% (152/302) had urinary incontinence without stage 3 or 4 POP, and 20% (60/302) had both stage 3 or 4 POP and urinary incontinence. The remaining 53 subjects did not have either urinary incontinence or stage 3 or 4 prolapse. They had lesser degrees of prolapse without urinary incontinence or other lower urinary tract symptoms (ie, dysuria). Subjects with stage 3 or 4 POP were older (66 vs 56 years, $P < .0001$), had higher vaginal parity (3 vs 2, $P < .0001$), and were more likely to have had a previous hysterectomy (56% vs 34%, $P < .001$). Patients with urinary incontinence were more likely to be taking antidepressants (27% vs 5%, $P < .0001$).

Table I Demographics (N = 302)

Age* (mean)	60 ± 14
BMI (mean)	28 ± 6 kg/m^2
Parity* (median)	3 (range 0 to 9)
Race (n)	
White	273 (90%)
African American	14 (5%)
Other	15 (5%)
Thyroid disorders (n)	54 (18%)
Hypertension (n)	106 (35%)
Esophageal reflux† (n)	51 (17%)
Diabetes (n)	19 (7%)
Charleson comorbidity index (median)	0 (range 0 to 10)
Antidepressants* (n)	52 (17%)
Narcotic use (n)	14 (5%)
Laxative use (n)	42 (14%)
Previous hysterectomy* (n)	123 (41%)
Previous rectocele repair (n)	23 (8%)
Previous anorectal surgery (n)	15 (5%)
Previous colon resection (n)	3 (1%)
No. of bowel movements per week (median)	7 (range 0 to 42)

* Significantly different in patients with stage 3 or 4 POP compared with those with incontinence and no advanced prolapse.

† Esophageal reflux was based upon a diagnosis by physician or patient taking medication for reflux.

Table II summarizes the overall prevalence of functional bowel and anorectal disorders in this population. Of the 302 subjects, 36% (95% CI 31–41) had constipation. The majority of constipation was caused by the outlet subtype. We observed 19% (58/302) of subjects who met the criteria for fecal incontinence, with 35 (12%) of these subjects reporting loss of a "small amount of stool (it stains underwear)" compared with 22 (7%) who complained of a loss of "moderate or large amount (2 teaspoons or more)." One subject did not quantify the amount of fecal incontinence. Functional anorectal pain was seen in 77 (25%) of subjects, with 20% (61/302) meeting the criteria for proctalgia fugax and 5% (16/302) having levator ani syndrome. Four percent (11/302) of subjects met questionnaire criteria for pelvic floor dyssynergia. We did not confirm this diagnosis with physiologic testing.

On physical exam, an abnormal anal wink was associated with diarrhea-predominate IBS ($P < .005$). Subjects with constipation were more likely than those without constipation to have an anal wink present on exam. The majority of these subjects were those with outlet type constipation ($P < .05$). Anal resting tone, squeeze strength, and levator ani contraction and genital hiatus measurement were not significantly different

Table II Prevalence of functional disorders of the bowel, rectum, and anus as defined by the Rome II criteria[1] in patients presenting to a tertiary urogynecology clinic (n = 302)

Functional disorder	Prevalence per 100 (95% CI) in UI group	Prevalence per 100 (95% CI) in stage 3 or 4 POP group	Overall prevalence per 100 (95% CI)
IBS	18 (13 to 25)	18 (9 to 33)	19 (15-23)
Diarrhea predominate	3 (1 to 7)	5 (1 to 17)	5 (3 to 8)
Constipation predominate	5 (2 to 9)	5 (1 to 17)	5 (3 to 8)
IBS-outlet	7 (4 to 12)	3 (0.4 to 13)	7 (5 to 11)
Functional constipation	3 (1 to 7)	5 (1 to 14)	5 (3 to 8)
Outlet type	17 (12 to 24)	23 (13 to 38)	19 (15 to 24)
Functional diarrhea	5 (3 to 10)	5 (1 to 17)	6 (4 to 9)
Functional fecal incontinence	22 (16 to 29)	5 (1 to 17)	19 (15 to 24)
Soiling	11 (7 to 17)	3 (0.4 to 13)	12 (8 to 16)
Gross	10 (6 to 16)	3 (0.4 to 13)	7 (5 to 11)
Anorectal pain disorders			
Proctalgia fugax	17 (12 to 24)	36 (23 to 52)	20 (16 to 25)
Levator ani syndrome	8 (5 to 13)	0	5 (3 to 8)
Pelvic floor dyssynergia	3 (1 to 7)	0	4 (2 to 6)

among different groups of functional bowel disorders. The presence of a sphincter defect on physical exam was associated with fecal incontinence ($P < 0.01$). Perineal body was statistically longer in patients with outlet type constipation (mean 3.5 $\pm$ 0.6 vs 3.1 $\pm$ 0.9 cm, $P < .01$) and proctalgia fugax (mean 3.4 $\pm$ 1.0 vs 3.1 $\pm$ 0.8 cm, $P < .05$).

Table III summarizes the frequency of selected bowel and anorectal symptoms seen in patients with prolapse and incontinence. On univariate analysis, hard or lumpy stools were associated with the stage of posterior vaginal wall prolapse ($P < .05$) and passing mucous (slime) during a bowel movement was associated with total stage of POP ($P < .01$). There was no association between number of bowel movements reported and both stage of posterior wall and total POPQ stage ($P = .4$ and $P = .7$, respectively).

After controlling for age, parity, antidepressant use, and previous hysterectomy, neither overall stage of POP nor stage of posterior vaginal prolapse was significantly associated with any of the functional bowel disorders, including constipation or its subtypes. There was no difference in the prevalence of constipation or any of its subtypes between patients with UI and those with stage 3 or 4 POP. Fecal incontinence was independently associated with UI (adjusted OR 6.3; 95% CI 2.6–19.1), but not advanced pelvic organ prolapse.

Comment

Our understanding of the pathogenesis of pelvic organ prolapse is limited. Risk factors cited in the literature range from childbirth, hysterectomy, age, ethnicity, genetics, constipation, and chronic intrabdominal pressure. Although frequent straining associated with constipation is often mentioned as an etiology of prolapse, the relationship remains unclear.

Snooks et al compared 24 women with chronic constipation for a mean duration of constipation of 19.4 years with 20 age- and parity-matched controls.[5] Their results showed that damage to the nerve supply of both the puborectalis and external anal sphincter occurred in chronic constipation. This was attributed to straining during defecation, resulting in perineal descent and resultant pudendal neuropathy. Lubowski et al described a relationship between perineal descent produced by a simulated defecation effort and pudendal nerve damage.[6] In 1994, Spence-Jones et al concluded that straining at stool as a young adult before the development of urogynecologic symptoms was significantly more common in women with prolapse than in controls (61% vs 4%, $P < .001$).[7] A bowel frequency of less than twice per week as a young adult was also more common (48% vs 8%).

However, several authors have found no association between various bowel complaints and prolapse. Weber et al described 143 women who completed a questionnaire assessment of bowel function with standardized exams using the POPQ method.[8] Straining to have a bowel movement was required rarely in 26.6%, sometimes in 49.6%, usually in 14%, and always in 9.8%. In their sample, severity of prolapse was not related to bowel dysfunction. Among 491 Swedish women, when a rectocele was present, 18% reported problems with emptying the bowel at defecation compared with 13% in the nonrectocele group, a nonsignificant difference.[9] Constipation was not related to prolapse in this population sample. Additionally, Hendrix et al found that self-reported constipation in subjects in the Women's Health Initiative was not a risk factor for pelvic organ prolapse.[10]

Table III Frequency distributions of selected symptoms of bowel and anorectal disorders

	UI group (n = 152)	Stage 3 or 4 POP group (n = 39)	Both UI and stage 3 or 4 POP (n = 60)	Neither UI or stage 3 nor 4 POP (n = 51)
Symptoms over a 3-month recall period	n (%)	n (%)	n (%)	n (%)
Discomfort or pain in your abdomen	58 (38)	11 (28)	19 (32)	18 (35)
Fewer than 3 bowel movements a week (0-2)	31 (20)	5 (13)	5 (8)	6 (12)
Hard or lumpy stools	52 (34)	14 (36)	25 (42)	21 (41)
Straining during a bowel movement	60 (39)	13 (33)	24 (40)	21 (41)
Feeling of incomplete emptying	56 (37)	16 (41)	22 (37)	18 (35)
A sensation that the stool cannot be passed (ie, blocked) when having a bowel movement	52 (34)	11 (28)	17 (28)	18 (35)
A need to press on or around your bottom or vagina to try to remove stool in order to complete the bowel movement	43 (28)	10 (26)	17 (28)	15 (29)
Accidentally leak or pass stool	34 (22)	2 (5)	19 (32)	4 (8)
Small amount (it stains underwear)	20 (57)	1 (50)	13 (68)	4 (100)
Moderate or large amount (2 teaspoons or more)*	15 (43)	1 (50)	5 (26)	0 (0)
More than 1 episode of aching pain or pressure in the anal canal or rectum	40 (26)	14 (36)	14 (23)	13 (25)
Lasts from seconds to minutes and disappears completely	26 (67)	14 (100)	10 (77)	10 (77)
Lasts more than 20 minutes and up to several days or longer†	12 (31)	0 (0)	3 (23)	3 (23)
Feel as if you had to strain to pass your stool at least one quarter of the time	68 (45)	13 (33)	25 (42)	19 (37)
Feel as if you were unable to empty the rectum at least one quarter of the time	39 (26)	10 (26)	23 (38)	15 (29)
Have difficulty relaxing or letting go to allow the stool to come out at least one quarter of the time	23 (15)	4 (10)	10 (17)	7 (13)

* One patient did not specify the quantity in subjects with both UI and stage 3 or 4 POP.
† One patient did not specify the time period in the UI and stage 3 or 4 POP.

All of these studies used various definitions of constipation. Using the more standardized Rome II definitions, our findings confirm that the symptom-definition of constipation is not associated with the degree of prolapse in patients presenting to a tertiary care urogynecology clinic. Also, we were unable to show a significant difference in the prevalence of constipation between patients with advanced pelvic organ prolapse only versus those with urinary incontinence only. If constipation were a significant cause of prolapse we would suspect this would not be the case, unless it is also a significant cause of urinary incontinence. Our data suggest, like that of other authors, that it is unlikely that prolapse is a significant contributor to constipation. Additionally, it appears that either constipation is not a significant contributor to prolapse, or that constipation contributes equally to development of both urinary incontinence and pelvic organ prolapse.

A logical reason for our inability to elucidate that constipation seems to be a confounding factor and not necessarily a true contributor of prolapse may be attributed to the lack of use of standardized definitions of functional bowel and anorectal disorders in the field of gynecology. Gynecologists often limit patient inquiries regarding bowel function to "are you constipated," "how often do you have a bowel movement," "do you strain during bowel movements," or "do you press in or around the vagina to have a bowel movement?" Important items that are not routinely asked include aching pain or pressure in the rectum, having difficulty relaxing or letting go to allow stool to come out, or the feeling of not completely emptying the rectum after a bowel movement. Although all of these symptoms are decidedly relevant to these areas it illustrates why we are unable to formally group patients as having or not having a disorder and possibly determining cause and effect.[1] For example, straining has been strongly associated (OR 66.7) with self-report of constipation.[11] However, self-reported constipation is neither sensitive nor specific compared with symptom-based criteria.[2] Self-reported frequency of bowel movements is poorly correlated with self-reported constipation.[11-13] Many

individuals with fewer than 3 bowel movements per week do not consider themselves constipated.[2] This highlights the need to better assess functional bowel disorders using consensus-agreed upon criteria in the gynecologic literature. Using such definitions allows us to make more formalized diagnoses of disease and improves our ability to investigate how certain disorders affect or are affected by disorders of the pelvic floor.

Little effort has been made to using the standardized definitions that are available.

The International Continence Society (ICS) has been responsible for standardization of terminology of lower urinary tract and validated definitions of pelvic organ prolapse.[14] The purpose of such definitions is to facilitate comparisons of published series from different institutions and longitudinal evaluations of individual patients. Clinicians and investigators of the pelvic floor are becoming increasingly aware of the relationships between gynecologic disorders of the pelvic floor and those of the lower bowel, rectum, and anus. This awareness necessitates the urgent need to standardize these areas in the gynecologic literature.

Based on our data, between 31% and 41% of patients presenting with pelvic organ prolapse or incontinence will meet formal standardized definitions of constipation. This is higher than estimates from a recent meta-analysis of constipation in North America that were between 12% and 19%.[15] Overall, outlet type and IBS-outlet type accounted for 73% of all cases of constipation in our population. This is slightly higher than the 60% of outlet type constipation and IBS-outlet reported in US women who have a diagnosis of constipation.[2] It also illustrates why constipation is presumed to be a either a contributing cause or a result of prolapse. This may be because of the abundance of overlapping symptoms in patients with both outlet type constipation and those we typically associate with pelvic organ prolapse. We speculate that the combination of symptoms results from pelvic organ prolapse, urinary incontinence, and constipation sharing a common etiology and that one may not necessarily cause the other. This could be studied prospectively by identifying women with constipation and its subtypes along with pelvic floor disorders at the onset of the study and determining which ones develop each of the disorders through time. A case-control study of bowel function comparing women with advanced stage prolapse to appropriate controls without prolapse or urinary incontinence would also be useful.

The association of fecal incontinence and urinary incontinence has been previously demonstrated. Jackson et al found a significant association between urinary incontinence and fecal incontinence (adjusted OR 4.6, 95% CI 1.9–11.2) in 247 patients with pelvic floor disorders.[16] Nichols et al found that patients with both pelvic organ prolapse and urinary incontinence were significantly more likely to have anal incontinence (OR 2.72, 95% CI 1.2–6.1) than patients with urinary incontinence only or pelvic organ prolapse only.[17] Cystometry in these women with and without anal incontinence (including flatal incontinence) showed no difference among stress, urge, and mixed urinary incontinence between the 2 groups. Interestingly, these data contradict our findings that fecal incontinence, as defined by the Rome II criteria, was independently associated with subjective urinary incontinence and not with stage 3 or 4 prolapse.

Surprisingly, we also found that a significant percentage of our patients suffer from some form of anorectal pain disorder. Proctalgia fugax may be seen in 16% to 25% of patients. This disorder seems to be moderately elevated in patients with advanced stage prolapse compared with those with incontinence. This association is unclear given the limited understanding of causes of proctalgia fugax. We speculate that the way the Rome II criteria asks the questions "over the last year, did you have more than one episode of aching pain or pressure in the anal canal or rectum" and "does it last from seconds to minutes and disappears completely" may be inaccurate in patients with advanced stage prolapse. These patients may interpret pressure resulting from a prolapsed vagina and not necessarily a distinct pain disorder. Levator ani syndrome was found in 3% to 8% of patients. This disorder, previously known as tenesmus, involves spasm of the levator ani muscles, making defecation painful. There were no cases of levator ani syndrome and pelvic floor dyssynergia in subjects with stage 3 or 4 prolapse. This is not surprising given that these disorders are associated with pain or spasm of the puborectalis, and patients with stage 3 or 4 prolapse often have atonic levator muscles.

The relationship between anorectal pain disorders and pelvic floor dyssynergia, as possible contributors of pain during sexual intercourse, is also unclear. In our population, we were unable to show a significant relationship between dyspareunia and proctalgia fugax ($P = .65$), levator ani syndrome ($P = .05$), and pelvic floor dyssynergia ($P = .21$). Although there is a trend towards an association between levator ani syndrome, pelvic floor dyssynergia, and dyspareunia, we lacked statistical power to show a difference. A larger study comparing patients with dyspareunia using the Rome II criteria for levator ani syndrome and pelvic floor dyssynergia is warranted.

The limitations of this study include the lack of appropriate control subjects. The ideal control subjects would be age-equivalent females without pelvic organ prolapse or urinary incontinence. This limitation prevents us from drawing definitive conclusions about the impact of constipation or any of the functional bowel disorders on pelvic organ prolapse or urinary incontinence. A second limitation is the lack of differentiation between the types of urinary incontinence. Knowledge of the types

of urinary incontinence would be useful in drawing conclusions about their relationship to bowel and anorectal dysfunction because the pathogenesis of stress urinary incontinence is largely attributed to a disruption of anatomic support of the bladder neck, while that of urge incontinence is believed to be neurogenic in origin.

Another limitation includes the lack of anorectal physiology studies in our subjects. Such testing is useful in documenting the presence and/or cause of certain anorectal disorders. Endoanal ultrasound may identify the presence of anatomic sphincter disruption. Defecography may identify intussusception as a cause of constipation. The Rome II criteria require the presence of abnormal relaxation or paradoxic contraction of the puborectalis muscle based on physiologic testing to verify the diagnosis of pelvic floor dyssynergia. Anorectal physiologic testing would provide better objective evidence of the presence of disorders.

In order to improve outcomes in women suffering from pelvic floor disorders, we must have a thorough understanding of the pathophysiology of the pelvic floor. This includes disorders of the lower bowel, rectum, and anus. These disorders are key contributors to the symptom complex reported by women in this population. Identification of such disorders may allow gynecologists to offer improved nonsurgical and surgical treatments to selected women.

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