## Medical Management Is First Step in Constipation

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FORT LAUDERDALE, FLA. — Constipation is a common complaint, and the causes for this condition are varied, Dana R. Sands, M.D., said at a symposium on pelvic floor disorders sponsored by the Cleveland Clinic Florida.

In a survey of more than 10,000 people, nearly 14% reported difficulty with evacuation, including infrequent defecation, incomplete defecation, and blockage of bowel movement.

"A surprising 12% said they need to use digital maneuvers in order to defecate—that's a high number," said Dr. Sands of the Cleveland Clinic Florida, Weston.

Among the causes of constipation are paradoxical puborectalis contraction, rectocele, and pelvic floor failure, including rectal prolapse and rectoanal intus-

susception, but sometimes the cause can be as simple as a lack of fiber and water in the diet, she said.

Those who haven't tried fiber supplements and increased water intake will often find their constipation is "miraculously" cured simply by trying these two things, she noted.

But a thorough history and physical examination are important in all patients, and every complaint of bleeding and obstruction should be investigated, she said. She also recommended that some form of endoscopic evaluation be performed in patients with such complaints.

"It's our job to make sure rectal bleeding really is from hemorrhoids, and that constipation really is constipation," and that obstructing cancer is not the cause in either case, she said, noting that she performs colonoscopy on all patients reporting changes in bowel habits.

Defecography, surface EMG, anal manometry, and colonic transit studies also may be useful. She said she also orders a cursory panel of blood work including measurement of thyroid-stimulating hormone, to look for obvious and easily correctable metabolic processes that could be causing constipation.

Most patients will be diagnosed on the basis of TSH, defecography, and/or surface EMG findings, she said.

Regardless of whether constipation is caused by dietary or metabolic conditions or by a benign condition that could be treated surgically, medical management options should be exhausted first.

For significant outlet obstruction caused by paradoxical contraction, for example, biofeedback and/or botulinum toxin (Botox) injections may be helpful. Biofeedback has had varying

success, with studies showing success rates from 8% to 100%.

In a Cleveland Clinic study of 194 patients who used biofeedback, 68 (35%) had complete resolution of symptoms, 27 (14%) had partial resolution, and 99 (51%) had no improvement. However, when patients were analyzed separately according to whether they completed all 10 biofeedback sessions, those who did complete all sessions had a success rate of 63%, compared with 25% in those who did not. Motivated patients are going to have better success, Dr. Sands said. Also, remember that a "refresher course" in biofeedback may be needed.

As for use of botulinum toxin, a small series involving four patients injected

with 30 U of Botox showed good results. One patient required reinjection, but none experienced incontinence. In another series involving 17 Cleveland Clinic patients injected with an average of

50 U of Botox, 11 (64%) had improvements in symptoms, and only 1 had transient fecal incontinence.

For patients with a rectocele, it is best to base therapy on the functional, rather than the anatomical, problem, Dr. Sands said. Try medical management, but consider surgery in those patients with rectoceles greater than 4 cm who fail to respond and in those who must use rectal or vaginal digitation or perineal support maneuvers to defecate.

Rectoanal intussusception is more difficult to treat. Start with dietary modification and fiber supplementation. Then try biofeedback, but don't expect too much, she said, noting that outcomes were somewhat disappointing in a recent study of 36 patients treated with dietary therapy, biofeedback, or surgery. Of 13 patients receiving dietary therapy, 5 improved, 6 had no change, and 2 worsened. Of 13 in the biofeedback group, 11 improved or had no change, and 2 worsened. Of 10 who underwent surgery, 6 improved, 1 had no change, and 3 worsened.

For rectal prolapse, it's important to evaluate for associated anterior compartment prolapse and to consider combined surgical correction when warranted. In the most severe cases of constipation, including those with severe outlet obstruction, colostomy may be necessary, although it should be a last resort. If you do perform a colostomy in these patients, consider it permanent, Dr. Sands said. Some colostomy patients will decide after several years that the precolostomy symptoms weren't so bad and will have their colostomy closed (usually by a different surgeon), but most eventually return, seeking to have the colostomy reopened because of intolerable symptoms.

## New Options Are Emerging for Treatment of Fecal Incontinence

FORT LAUDERDALE, FLA. — Anterior overlapping sphincter repair is commonly performed in patients with fecal incontinence secondary to an anterior defect in the sphincter complex, but long-term outcomes are questionable.

In the short term, 50%-75% of patients achieve good control of solid and liquid bowel movements. But few of the patients requiring such surgery—usually as a result of obstetric or iatrogenic trauma—have good long-term function, Eric G. Weiss, M.D., said at a symposium on pelvic floor disorders sponsored by the Cleveland Clinic Florida.

In one study of 42 patients who underwent the surgery, half were continent after the surgery, and only 14% were continent at a 6-year follow-up. In another study of 191 patients, 40% had some continence, but only 6% had complete continence at 10-year follow-up, said Dr. Weiss of Cleveland Clinic Florida, Weston.

Neuropathy has emerged as a predictor of poor surgical outcome, he noted.

In patients who don't do well after surgery, consider whether the repair was successful from an anatomic standpoint. Ultrasound can help determine whether the sphincter repair is intact or if there is a persistent defect. A second attempt at surgical repair may be warranted in cases of persistent defect, but if the initial repair is intact, an alternative procedure should be considered, Dr. Weiss said.

Among the other surgical options available or under investigation are:

► The artificial anal sphincter. In a recent report on the North American experience with the artificial sphincter, nearly half of 112 patients required surgical revision of the device, and 37% had the device explanted (with successful reimplantation in 7 patients). Of those with a functioning sphincter at study completion, all had significant improvement

in fecal incontinence and quality-of-life scores; the success rate in these patients was 85%, but the intention-to-treat success rate was only 53%. "When it works, it works well, but it takes a lot to get it to work well," he said.

- ▶ Sacral nerve stimulation. Implantation of a device that stimulates nerves originating from the sacral nerve foramen was originally used to treat urinary incontinence, but it also has proved useful for concomitant fecal incontinence. Preliminary results of ongoing trials of its use for fecal incontinence look promising, with 40%-75% of patients achieving continence.
- ▶ The Durasphere procedure. Microscopic carbon-coated beads are injected into the anal canal and lower rectum as part of this experimental minimally invasive office procedure, thought to improve internal sphincter function by increasing tissue bulk. Results of small phase II studies are promising, with patients experiencing significant decreases in fecal incontinence and quality-of-life scores. Durasphere EXP Injectable Bulking Agent is approved for treating stress urinary incontinence due to intrinsic sphincter deficiency in women.
- ▶ Secca. The Secca System is an FDA-approved device that uses radiofrequency energy to deliver scarring to the anal canal to treat fecal incontinence by changing tissue tone. In a prospective multicenter study involving 47 patients, modest but significant improvements in fecal incontinence scores (from 14 to 11 on a 0-20 scale) were seen at 6 months, with a further decrease to about a score of 9 at long-term follow-up.
- ► Stoma. A patient who fails all other options may be a candidate for a stoma. This may seem like a terrible option, but properly counseled patients may handle a stoma very well and consider this approach preferable to wearing diapers, Dr. Weiss said.

## Anal Manometry Helps Evaluate Abnormal Anorectal Physiology

FORT LAUDERDALE, FLA. — Anal manometry is a useful tool for the evaluation of patients with abnormal anorectal physiology, including those presenting with constipation, fecal incontinence, proctalgia, or rectal prolapse, according to Dana R. Sands, M.D.

Manometry provides useful information about the functional status of the anal sphincter and distal rectum, and often is used with other tests such as anal ultrasound, anal sphincter EMG, pudendal nerve terminal motor latency assessment, defecography, and small bowel and colonic transit studies, said Dr. Sands of the Cleveland Clinic Florida, Weston.

In patients with fecal incontinence, for example, anal ultrasound is the cornerstone of treatment, but anal manometry, EMG, and pudendal nerve assessment "round out the evaluation," she said at a symposium on pelvic floor disorders sponsored by the Cleveland Clinic Florida.

Anal manometry, however, is not well standardized, Dr. Sands said, noting that dif-

ferent facilities have different protocols and normal values. "But it is so useful," she added. Some manometry devices include a microtransducer, some use air-filled balloon systems, and still others use continuously perfused probes.

The Cleveland Clinic uses a balloon-tip catheter system that is perfused with water. The device measures rectal sensation, resting and squeezing pressures at different levels in the anal canal, and rectal compliance, all of which can play a role in fecal incontinence. Although some surgeons say their index finger is the best device for identifying anal sphincter pathology, manometry provides a higher level of information than that achieved via digital rectal examination, Dr. Sands said.

In one study of 64 patients, digital rectal examination performed by an experienced colorectal surgeon yielded 63% sensitivity and 57% specificity for internal anal sphincter pathology, and 84% sensitivity and 57% specificity for external anal sphincter pathology.