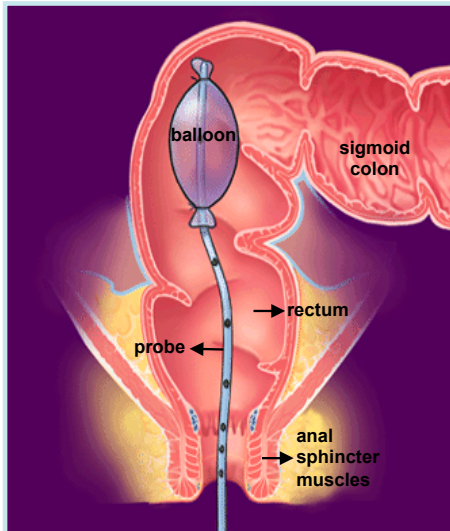


Biofeedback Therapy

An educational handout for patients



What is biofeedback therapy?

Biofeedback therapy can improve and restore normal bowel function. It is an education and exercise program that requires several sessions. It is done in an outpatient clinic.

The bowel muscles are located deep inside the body. Biofeedback therapy uses an instrument – a thin, flexible probe – that rests against the bowel muscles to give information (feedback) about how these muscles are working.

Who might benefit from biofeedback therapy?

Your doctor may suggest biofeedback therapy if you have:

- **Stool leakage**, which is also called fecal incontinence.
- **Constipation**, particularly if you have difficulty passing stool, a condition called dyssynergic defecation, in which the bowel muscles are not able to coordinate properly to empty stool from the bowel.
- **Poor or impaired rectal sensation**, which decreases your awareness of stool in the rectum.

Biofeedback therapy can also help children who have stool leakage or stool retention. Stool leakage in children may be called encopresis.

What are the common tests for bowel disorders?

To determine if biofeedback therapy would help you, your doctor may order a test to find the cause of your constipation or stool leakage.

Anorectal manometry: This test measures:

- strength of the anal sphincter muscles
- sensation or feeling in the rectum
- reflexes that control bowel movements
- movement of the rectal and anal muscles

Anal ultrasound: This test finds out if the anal muscles are damaged and if they can be repaired with surgery.

Balloon expulsion test: This test measures the ability to pass a balloon or stool-like device from the rectum.

Colonic transit study: This test measures the speed at which stool moves through the colon. An X-ray is taken after several small plastic rings are swallowed. This study can also be done by swallowing a wireless capsule.

Defecography: This test checks how the rectum is working during a bowel movement. Barium paste is placed in the rectum. The patient is asked to cough, squeeze, and push the barium out and an X-ray is taken. Defecography may also be done by magnetic resonance imaging (MRI).

How does biofeedback therapy help constipation and dyssynergic defecation?

Normally, when there is stool in the rectum, the anal muscles tighten to prevent stool leakage. If the anal muscles are weak or do not contract in a timely manner, stool leakage may occur. Poor sensation in the rectum or damage to the nerves in the rectum may also lead to fecal incontinence. Some of these problems can be treated with drugs or with special exercises of the pelvic floor muscles that can strengthen the muscles. Biofeedback therapy can improve anal muscle strength and improve rectal sensation and restore the normal ability to hold stool.

How do I prepare for biofeedback therapy

Biofeedback therapy requires at least 6 sessions. These sessions usually are performed once a week or once every 2 weeks, although some centers may have daily sessions. You shouldn't eat anything during the 2 hours before the session. You may take your regular medicines. Some centers recommend an enema 2 hours before the session. After the session, you may drive yourself home and you may return to your normal activities.

Who performs biofeedback therapy?

In most centers, a trained therapist, often a nurse or a physical therapist, performs this therapy. In some centers, a doctor supervises this therapy.



How is biofeedback therapy performed?

Each session takes about 45–60 minutes. The therapist will explain the procedure and review the normal anatomy and function of the bowel. The therapist will talk to you about the goals of biofeedback therapy. You will be asked to fill out questionnaires and to keep a record of your bowel habits at home. You will also be asked how you practice the techniques at home.

A digital rectal exam is performed. If there is significant amount of stool, you may be given an enema. A thin, flexible probe that detects muscle activity is placed in your rectum. The probe is connected to a computer and a recording device that measures the strength of your anal and rectal muscles. The therapist will show you how to improve your posture, your breathing, and your position when you have a bowel movement. You will also learn how to coordinate your bowel muscles and improve the strength of these muscles. The feedback received from the probe lying close to your bowel muscles will be used to train your bowel muscles.

Training for fecal incontinence: The therapist will teach you how to identify your anal muscles and how to selectively squeeze and improve the strength of these muscles using visual feedback from the computer monitor.

Training for constipation and dyssynergic defecation:

You will sit in front of a computer monitor and the therapist will talk to you about the changes in the anal and rectal muscles when you push as if to bear down. The therapist will teach you how to push properly with your belly and rectal muscles. You will also learn how to relax the anal muscles at the same time.



Training for poor rectal sensation: A probe with a balloon is placed in your rectum. The balloon is inflated in stages and you will be asked to focus on the feeling (sensation) in your rectum. The balloon is inflated and deflated several times. By recognizing visual cues on the computer monitor and by paying attention to what you feel, you will become more aware of rectal sensations.

What are the benefits of biofeedback therapy?

Biofeedback therapy improves bowel symptoms by training your muscles and improving your awareness for stool in the rectum.

What are the risks of biofeedback therapy?

Biofeedback therapy is safe. It is unlikely to cause pain. It is natural to feel shy or embarrassed. Please remember that your therapist and doctor understand bowel problems. They are aware of your feelings, and will help you feel as comfortable as possible.

A latex balloon may be used for a test or therapy session. If you are allergic to latex, be sure to ask the technician or therapist to use a latex-free balloon.

For a list of doctors in your area who specialize in gastrointestinal motility problems, go to our web site:

[www • motilitysociety • org](http://www.motilitysociety.org)

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