CONTINENCE FACTS

The Canadian Continence Foundation

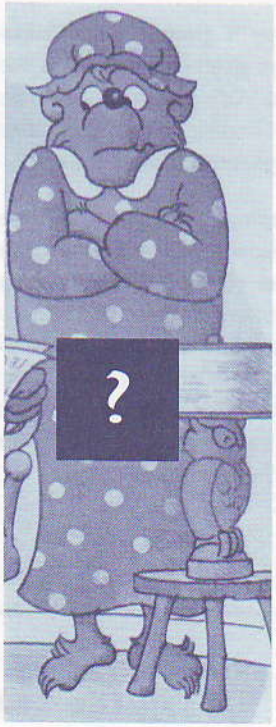
URINARY INCONTINENCE? BIOFEEDBACK MAY HELP!

Claudia Brown, Physiotherapist, B.Sc. P.T.

The pelvic floor muscles line the undersurface of the pelvis, and include the muscles of the urinary and anal sphincters. A good pelvic floor contraction supports and controls the bladder and helps the sphincters to close. It has been proven that pelvic floor muscle exercises can help patients who suffer from some types of urinary incontinence. Typically, this type of exercise has been called the Kegel exercise, and it requires repeated contractions of the pelvic floor muscles. This is to train them to work when necessary, by preventing urine from exiting the bladder at inopportune times.

BUT wait, what if you're not sure how to do the pelvic floor exercises?

Unlike the biceps muscle, the pelvic floor muscle is not easily seen, nor is its contraction as obvious as a biceps curl! For these reasons, BIOFEEDBACK can be particularly helpful in pelvic floor muscle training. Biofeedback therapy enables you to visualise the muscle activity on a monitor, and it immediately shows you what happens when you make the effort to contract. It makes it much easier for you to learn the exercises and you can be more confident in your training when you know that you are exercising properly.



Biofeedback therapy is available in some hospital settings and in some private clinics. It is usually given by a physiotherapist, and in some cases it is given by a doctor, nurse, or technician. The patient lies comfortably on a treatment table, with his/her head slightly raised on a pillow so that he/she may see the biofeedback monitor. For female patients, an electrode is gently inserted into the vagina, and for male patients an electrode is gently inserted into the anus. Sometimes, surface electrodes may be used instead, and these are placed on the skin in the perineal area. All of these electrodes are able to read the activity of the pelvic floor muscles, as the muscles span the area from the pubic bone in front to the coccyx in the back (See Fig. 1). Other electrodes may also be placed on the skin over the abdominal muscles, to monitor the activity of these important muscles as well.

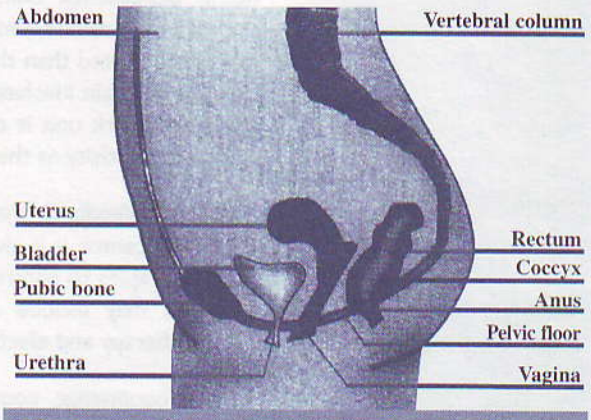


Figure 1 - Sideview of female pelvis

The patient will first see a line, which represents the activity within the muscle while she is at rest. As she tries to contract the pelvic floor muscle, this line should move upwards, and the line should come back down as she relaxes the muscle. As she contracts and relaxes, she is practicing the activity, and she is also subconsciously memorizing the activity so that she can eventually exercise easily without the machine. The therapist will instruct the patient on different ways to contract the muscle, in order to train different muscle groups and different muscle fiber types. For example, she can practice maximum strength by contracting strongly for short periods of time. Or, she can practice endurance by contracting moderately for long periods of time, or practice contraction speed by doing several quick successive contractions. All of these appear differently on the monitor, so the patient can visualise her muscle activity with different exercises, and can understand the concepts of training more easily. Fig. 2

(please turn over)

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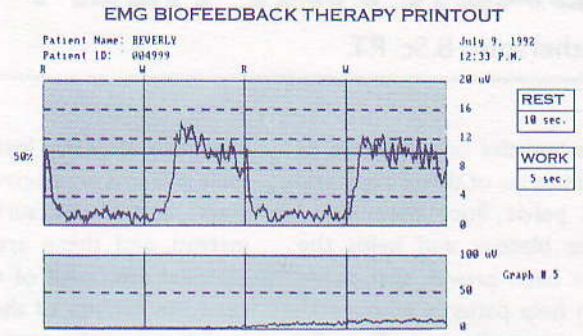

Figure 2

If the patient lives far from a treatment centre, or if she simply prefers to work on her own, she may use a home biofeedback unit. The home units may be purchased or rented, and usually have graphics that are less sophisticated than those at the treatment centres. There is no pain involved with biofeedback therapy, as the biofeedback unit is only monitoring and displaying the muscle activity as the patient exercises.

When biofeedback therapy is given in a specialized treatment centre, it is always given in conjunction with other therapies to control urinary incontinence. These therapies may include counselling, exercise therapy, manual therapy and electrical stimulation therapy.

With continence counselling, the patient is given detailed information about how the bladder works and what can be done for bladder control. Bladder irritants such as coffee and chocolate are discouraged, and tips on avoiding urinary infections and skin breakdown are given. The patient may learn to work with a urinary diary, which helps her to track her progress and work towards a normal urinary frequency. (Normally, one should empty the bladder 5 – 8 times per day.)

Exercise therapy involves varied training of the pelvic floor muscles and the abdominal muscles, both groups playing important roles in bladder control. Patients are given a home program, which is essential to the success of treatment. It is usually recommended to start with three sets of 10 sustained contractions (5-10 seconds each) per day and to gradually increase the frequency and duration of the contractions. Patients then learn to identify their problem positions and activities, and to contract the pelvic floor muscles at the appropriate moment in order to avoid incontinent episodes. For example, if a patient suffers urinary loss every time she coughs, she must learn to contract the muscles prior to the cough and to keep them contracted until the cough is over. The goal is so that the patient will eventually contract the pelvic floor automatically, when necessary.

Manual therapies are usually performed by a physiotherapist. The therapist will use massage, stretch and resistance techniques to improve the performance of the muscle.

For electrical stimulation therapy, a pain-free electric current is applied to the muscle, causing the muscle to contract. This gives a boost to the muscle and allows the patient to experience the sensation of a contraction, helping her to learn to imitate that contraction on her own.

In summary, biofeedback therapy is an interesting and effective way to learn to do pelvic floor exercises. Its success has been proven, on its own and in conjunction with other continence therapies. Depending upon the nature of the incontinence problem, some patients may do better than others with pelvic floor muscle training. We suggest you discuss your problem with your doctor to see if you are a good candidate for this type of therapy.

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For more information about incontinence contact

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