

These methods can be taught by the healthcare team, and allow the patient to regain some control over bladder function. They are not, however, effective in more severe cases.

Kegels: exercises to strengthen pelvic floor muscles were described by Kegel in 1948. They are used to regain bladder control, especially if the pelvic floor muscles or sphincter have been weakened by childbirth, for example.

In order to identify the relevant muscles, the patient needs to attempt to stop the flow of urine in midstream. If the urine flow reduces, then the correct muscles have been used.

The exercise needs to be repeated 10 times (30 seconds each) per hour or twice daily (4 seconds each for 5 minutes). Immediate benefits are not apparent, but after 8-12 weeks, some positive results should start to appear.

Note that after the initial identification of the correct muscles, it is important NOT to perform Kegels exercises during urination, as urine might be retained.

Weighted cones are used in women, to help identification of the muscles. They are placed in the vagina and can be worn for 15 minutes twice daily while walking or standing.

Kegels improves urethral support and closure mechanisms and will reduce the incidence of stress incontinence.

Biofeedback/Electrical Stimulation: this is practised to help people to become aware of, and thus to control, their urinary tract muscles.

Instruments are used to record electrical signals arising from muscle contraction.

These are converted to auditory or visual signals in order for the patient to recognise them. Weakness or tension can be better controlled and muscle activity co-ordinated. Biofeedback may well be used in conjunction with Kegels.

Neuromuscular electrical stimulation (NMES) may be used to 're-educate' and strengthen urinary tract muscles. Electrical stimulation of the pudendal nerve produces contraction of the pelvic floor and muscles around the urethra.

A probe is inserted into the vagina or anus and a low-intensity (below pain threshold) impulse is applied. Patients are encouraged to attempt to voluntarily contract the muscles at the same time.

Treatment usually lasts about 20-30 minutes a session. Devices for home use are also available.

Neocontrol Pelvic Floor Therapy System: a pulsating magnetic chair which induces pelvic floor muscle contraction, in sessions of 20-30 minutes, for a course of about 8 weeks. It is akin to an automatic Kegels machine. Available in the United States, from Neotonus, Inc.

Bladder training/timed voiding: having filled in a chart of urination and leaking events, the patient is instructed by the physician as to the best pattern to plan timed urination. If the patient has frequency, he/she will be encouraged to gradually increase the times between voiding, learning to resist the urge to urinate, postponing urination as per an individualised timetable.

Crede manoeuvre: a technique which uses massage to assist the bladder in emptying. While sitting on the toilet, the patient places his/her hands on the abdomen, pressing downward and inwards on the lower abdomen while urinating.

This encourages more complete bladder emptying. However, it must be noted that this technique should NOT be used in patients with dyssynergic bladder, as it may cause urine reflux.