

# **Feedback from the Pelvic Floor Exercises Group for Erectile Dysfunction**

**Marijke Van Kampen & Grace Dorey**

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## *Erectile dysfunction*

Erectile dysfunction is the inability to achieve or maintain an erection sufficient for satisfactory sexual performance for both parties (National Institutes of Health Consensus Development Conference, 1993). An estimated 152 million men worldwide suffered from ED in 1995 and this figure was projected to rise to 322 million men worldwide in 2025 (Aytac et al, 1999).

## *Outcome measures*

The International Index of Erectile Function (IIEF) is the main outcome measure as it was found to be a psychometrically sound, reliable, validated, multidimensional scale for the assessment of erectile function (Rosen et al, 1997).

## *Digital anal examination*

Digital anal examination has been found to be a valid and reliable method of assessing puborectalis muscle strength in men when performed by an experienced investigator (Wyndaele and Van Eetvelde, 1996).

## *Blind assessment*

In order to reduce bias, a urologist who was blinded to the grouping assessed subjects at 3 months and 6 months from baseline. Subjects were asked the following standard questions: 'How is your erectile function now?', 'How is your post-micturition dribble?', 'Do you want to continue your current treatment?' and 'How do you feel now compared to how you felt when you entered the study?'.

## **Case study**

Mr 2 was randomly assigned to the intervention group. He was 62 years of age, had been married for between 5 and 15 years, cared for his disabled wife, had only one partner and visited the GP as a result of a joint decision between him and his wife. For one and a half years, he had problems gaining an erection and experienced no nocturnal erections. He suffered from a few drops of post-micturition dribble. He had not undergone any urological surgery. He had suffered from a right epididymal infection two years previously, which was successfully treated with antibiotic medication. He used a ventolin inhaler for asthma. He drank 4 units of alcohol on some days, smoked 10 cigarettes a day, performed daily strenuous exercise, was the correct weight and did not cycle.

### **Intervention**

Mr 2 was randomised into the intervention group and received 5 weekly treatments of pelvic floor muscle exercises and manometric biofeedback and home exercises for 3 months. This was followed by 3 months of home exercises.

### **Baseline assessment**

On digital anal examination he was graded 3/5 and could perform a pelvic floor muscle contraction with penile withdrawal and scrotal lift. Biofeedback recorded his maximum anal pressure reading to be 48cmH<sub>2</sub>O with a hold pressure of 47cmH<sub>2</sub>O.

He was taught pelvic floor muscle exercises including a strong post void contraction and advised on lifestyle changes. One week after commencing pelvic floor muscle exercises he reported a return of nocturnal erections. He then was not seen for 3 weeks as he slipped on the ice and fractured two ribs. At 4 weeks from baseline, he was waking up regularly with an erection and reported successful sexual intercourse.

### **3 months assessment**

At the 3 months assessment Mr 2 improved his pelvic floor muscle strength considerably. The digital anal examination improved from 3 to 5 out of 5. His maximum biofeedback reading increased from 48 cmH<sub>2</sub>O to 190cmH<sub>2</sub>O.

At the 3 months blind appointment with the urologist Mr 2 reported he was cured of his erectile problem, his post-micturition dribble was greatly improved and he would continue with his pelvic floor muscle exercises. He reported he was 'A lot better'.

### **6 months assessment**

At 6 months he presented for his follow-up appointment with a chest infection. He reported normal erectile function and no post-micturition dribble. His digital anal examination revealed 4/5 pelvic floor muscle strength with biofeedback readings of 100cmH<sub>2</sub>O maximum with a hold of 75cmH<sub>2</sub>O after 10 seconds. He was discharged with advice to keep practising his pelvic floor muscle exercises for life. He had an appointment for the urologist, who was blinded to the grouping.

### **Feedback**

Erectile Dysfunction can be treated with PFMEs

Men **may not** improve if they have:

vascular insufficiency

hormonal abnormalities

interruption of the neural pathways

psychogenic factors

diabetes mellitus

or are on prescription medications such as:

antihypertensives

antidepressants

luteinizing-hormone-releasing hormone (LHRH) analogues

or if they have had:

accidental trauma

trauma from surgery (Van Kampen is currently running a trial to see if pelvic floor exercises at 1 year after radical prostatectomy will show improvement)

radiation therapy

Urge urinary incontinence can be associated with sexual dysfunction.

Lifestyle related factors include:

cigarette smoking

alcohol abuse

drug abuse

saddle pressure from cycling and horse riding

lack of exercise

obesity.

## **Treatment using pelvic floor exercises**

### **1 In lying position**

Lie on your back with your knees bent and your feet and knees slightly apart. Tighten your pelvic floor as if you are trying to stop wind escaping and urine leaking. You should feel the base of your penis move towards your body and your testicles rise. Hold the pelvic floor muscle contraction **as strongly as you can**. Try to avoid holding your breath or tensing your buttocks.

*Perform 3 maximum contractions lying down in the **morning** holding for up to 10 seconds, each followed by a 10 second rest. Repeat in the **evening**.*

### **2 In sitting position**

Sit on a chair with your knees slightly apart and tighten your pelvic floor muscles as if you were trying to stop wind escaping and urine leaking. You should feel the base of your penis move towards your body and your testicles rise. Hold the pelvic floor muscle contraction **as strongly as you can**. Try to avoid holding your breath or tensing your buttocks.

*Perform 3 maximum contractions sitting down in the **morning** holding for up to 10 seconds, each followed by a 10 second rest. Repeat in the **evening**.*

### **3 In standing position**

Stand with your feet apart and tighten your pelvic floor muscles. If you look in a mirror, you should be able to see the base of your penis move nearer to your body and your testicles gradually rise. Hold the pelvic floor muscle **contraction as strongly as you can**. Try to avoid holding your breath or tensing your buttocks.

*Perform 3 maximum contractions standing up in the **morning** holding for up to 10 seconds, each followed by a 10 second rest. Repeat in the **evening**.*

### **4 Fast contractions**

Some of these pelvic floor muscle contractions can start quickly with a fast contraction and some can begin slowly with a slow build up of strength.

### **5 Whilst walking**

Try lifting your pelvic floor up slightly when walking to use the muscles during activity. When you have an urge to pass a motion, use this exercise to stop faeces from escaping whilst you are walking to the bathroom.

### **6 After urinating**

After you have voided urine, try tightening your pelvic floor muscles **strongly** to avoid the embarrassing after-dribble of urine.

### **7 After passing a motion**

After passing a motion tighten your anal sphincter before wiping your bottom. This helps to return any faeces not voided back up the anal canal to the rectum and makes it easier to wipe your bottom.

## **8 'The knack'**

Tighten your pelvic floor muscles quickly just before and during any activities, which increase your abdominal pressure, such as coughing, sneezing, lifting, shouting, bending and getting out of a chair.

## **9 During sexual activity**

Try tightening your pelvic floor muscles rhythmically to achieve and maintain penile rigidity during sexual activity.

Exercise routines now are moving much more towards using the pelvic floor muscles during functional activities such as those shown in exercises 5, 6, 7, 8 & 9.

## **Signs of improvement**

Return of nocturnal erections (waking up with an erection)

More rigid erection

Erection which can be sustained for longer

Erection firm enough for penetration

## **Increase in pelvic floor strength**

Men with 100cm H<sub>2</sub>O and over from anal manometry were more likely to improve

Men need to increase their pelvic floor strength to grade 5 or 6 out of six.

Men need to continue some pelvic floor exercises for life.

## **Research**

A blind assessor found that after 6 months pelvic floor exercises (Dorey et al 2004):

40% of men were cured

35% were improved

25% failed to improve

*Reason for failures:*

Cardiovascular problems

Cardiac bypass surgery

Diabetes mellitus

Bilateral orchidectomy

Peyronie's disease

Prostatic, testicular and low back pain

High alcohol intake

Low testosterone level

Bicycle racing for years