Do you wet yourself when you sneeze? Many women find, after having a baby, that childbirth has brought with it an unpleasant side effect – leakage of urine due to weak pelvic floor muscles or an overactive bladder. Urinary incontinence is an embarrassing problem, but, as Dr Anil Sharma explains, it is very treatable

suffering in silence

The accidental leakage of urine in adults is a terribly debilitating condition, causing not only major stigma and isolation, but very significant social and hygiene problems. It causes considerable physical and psychological ill health and huge damage to the economy of nations, both in terms of days of work lost and costs of treatment. In the UK, the cost to the National Health Service (NHS) is around £424 million (almost NZ$1.1 billion) per annum.

In a survey of over 10,000 women in England over the age of 40, over 20% or one in five women had urinary incontinence. In New Zealand, it has been reported that one in three women experience the problem. Although many women also have prolapse (downward movement) of the womb or vaginal walls, this is not always the case, and prolapse will be discussed in a later article.

Types of urinary incontinence

There are two types of urinary incontinence that women experience: Stress incontinence and overactive bladder.

Stress incontinence

Stress incontinence is loss of control of the "valve" (or "tap mechanism") that prevents urine from constantly leaking out of the bladder. It is due to injury to the supporting structures of the pelvic floor during pregnancy, childbirth, and, later, menopause. It is known as stress incontinence because it usually happens after "stresses" like coughing, sneezing, laughing, exercise, or even standing up from a seated position.

Overactive bladder

An overactive bladder often causes frequency (the need to go to the toilet many times) during the day and/or night. It also causes the sudden urge to "go", with leakage happening if the individual doesn't make it to the toilet in time.

The bladder starts to behave independently of the woman's "control", squeezing whenever it wants to. This can happen very unpredictably and at awkward times. Sometimes it happens during certain evocative circumstances, like opening the front door or hearing a tap running. Overactive bladder can be due to a number of causes, including bladder nerve damage secondary to childbirth, but, sometimes, it is "idiopathic" (a word that doctors use when they don't know the cause of something!).

Bladder symptoms can be very misleading to medical professionals, not least because of learned behaviour – for example, many women deliberately and frequently empty their bladders to avoid leakage that might happen otherwise. Many women also know where all the most convenient public toilets are located when they go out on the town or or on a shopping trip, to ensure that they can maintain dryness.

In most cases, the type of symptoms a woman has doesn't always tell us which main type of incontinence she has, or, indeed, if she has both types. This is obviously important to be able to plan the best treatment. Almost predictably, the treatment of one type can make the other type worse!

The diagnosis and planning of treatment, either surgical or medical/behavioural, often requires further tests. These tests are called urodynamics and are generally used when non-surgical treatment has failed, when surgery is planned, or where there are complex symptoms.

General treatment points

Although women with urinary incontinence can benefit from incontinence pads, these can become very expensive and are nothing more than a control rather than a specific treatment of the problem. Also, many women believe that there is nothing that can be done, so they just end up putting up with problem. This issue is made worse by the fact that the embarrassing nature of the problem means that women don't discuss their situation even with close friends or relatives.

Your family doctor can start by ruling out a urine infection with a mid-stream urine test. Although the ideas around fluid intake are controversial, it would be reasonable to limit fluid intake (all drinks in total) to two litres a day for women with

urinary incontinence. For the same reasons, smokers should try to quit, since chronic chest problems make urinary incontinence worse (see www.quit.org.nz).

Constipation needs to be treated to prevent excessive bearing down, and caffeine junkies should be advised to reduce their intake, although it remains controversial whether long-term caffeine excess is a significant cause of urinary incontinence.

Pelvic-floor exercises can be very helpful throughout life, both after having a baby and for the long-term (see "Pay attention to your pelvic floor" on page 138 for suggestions on how to do these exercises properly, and information about their benefits). Sometimes oestrogen creams given as vaginal insertions are said to be beneficial in postmenopausal women with incontinence, although contradicting evidence about this exists.

Your family doctor will also be able to advise whether any medications that you may be taking are making the problem worse. For example, some medicines that are for high blood pressure work by making the patient urinate more often and in greater amounts.

Similarly, cutting down on alcohol intake can relieve symptoms, as can weight loss (by reducing pressure on the bladder and pelvic floor). Control of asthma and chest problems can also help.

Subsequently, a review by a gynaecologist trained in pelvic floor problems and urinary incontinence is advisable, as the field is developing and changing rapidly.

Treatment of stress incontinence

There are three treatment options commonly suggested for women suffering from stress incontinence: Conservative treatment, devices, and surgical treatment.

Conservative treatment

Kegel or pelvic-floor exercises (PFE) have been successful for many women since 1948. The aim is to "body-build" the pelvic floor muscles by contracting them.

Devices

Although not widely used, electrical or magnetic stimulation of the pelvic floor muscles can be used to contract the pelvic muscles as well. Other types of devices that are inserted into the vagina to "hitch-up" the bladder neck can temporarily improve the problem, although side effects include urinary tract infections and soreness. These devices are not useful for women who are sexually active.

Surgical treatment

The latest widely used surgical treatment involves, under anaesthesia, the placement of a small tape or sling. This sits under the urethra (the short tube that women urinate from), and, when the bladder gets pushed down (such as during a sneeze), the urethra kinks on the tape. Therefore, urine is prevented from leaking out. This is effective around 90% of the time and most women have been delighted by the results. This operation is

short and quite safe, having replaced much bigger procedures.

Newer forms of tapes or slings are being developed to make the procedure safer still, with promising preliminary results. Sometimes, a semi-fluid bulking agent can be injected around the entrance to the bladder to give the valve mechanism a bit more substance (like squeezing a hose), and this may be useful for women who cannot tolerate an operation because of other medical problems.

If a woman needs surgery, prolapse (downward movement of the pelvic structures such as the womb) can be corrected at the same time.

Treatment of overactive bladder

This is the second most common cause of urinary incontinence in women and affects 30% of incontinent women, getting worse with increasing age.

Conservative treatment

Bladder retraining therapy aims to re-educate the bladder about exactly who is the boss. This is a good form of treatment, but requires a lot of hard work and patience. Therefore, the results can be variable. The final aim is to reduce the frequency of bladder emptying to every three to four hours by gradually increasing the interval between each trip by 10 minutes, every week or so. Another way of doing this is to go every hour on the hour, whether you want to or not, and then increase this time by 10 minutes every few days. Most patients worry about this approach because their mothers always taught them to not hold on! Initial success rates can be as high as 88%, but tend to decline again with time to half this figure.

Medical treatment

Despite the success that can be achieved with bladder retraining, medicines are commonly used as treatment for overactive bladder. They work by reducing bladder contractions. Unfortunately, most also produce unwanted side effects, especially dry mouth and blurred vision, which must be balanced against the benefits. They can also cause drowsiness and patients should be advised against driving or operating dangerous machinery. Newer tablets have fewer side effects, but are currently expensive (around $5 a tablet).

Another treatment involves low-grade electrical therapy to a nerve behind the ankle via an acupuncture needle. It is thought that the nerves that get stimulated "backwards" also lead to a controlling influence on the nerves that supply the bladder, because all the nerves arise from the same part of the spinal cord.

Almost everyone knows about the use of Botox to paralyse the muscles that cause facial wrinkles. Botox is now also used for severe cases of overactive bladder, with injections into the bladder muscle under anaesthetic, and this is showing some very promising results that last for around six months.

Don't just put up with it

Urinary incontinence causes significant ill health, severe embarrassment, and damage to the economy. Many women suffer in silence as they are from the era that "quietly coped". It is only by discussing this topic widely that the extent of the problem and its treatment can be publicised to empower sufferers to seek help. While it is true that not everyone with this problem can be helped, the majority can, so don't just put up with it!

Dr Anil Sharma is a specialist doctor in Gynaecology and Maternity. He is very involved in lectures and updates for family doctors and frequently takes part in debate regarding women's health and maternity for print media and radio. He believes that anxiety and fear can be conquered by knowledge. Anil emigrated to New Zealand from the UK in 2001 with his wife, Rachel, and he tries hard to be a hands-on and fun father (putting golf and cars on hold for the time being) to their three daughters, who were all born here. For further information about Anil's practice, visit www.dranilsharma.co.nz.