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### URINARY INCONTINENCE

#### Urinary incontinence

##### **What is urinary incontinence?**

Many women involuntarily leak small amounts of urine at times. When leaks become frequent or severe enough to be a problem, this is called urinary incontinence, or loss of bladder control. This condition often can be treated with success.

##### **How common is urinary incontinence?**

It is estimated that urinary incontinence affects between 10-25% of Australian adult women. It may affect women of all ages. Despite being so common, approximately 60% of people suffering from incontinence do not seek professional help for their condition. It appears that a combination of embarrassment and the belief that urinary incontinence is a natural consequence of ageing and childbirth deters people from seeking the appropriate treatment.

##### **What causes urinary incontinence?**

There are a number of factors that contribute to incontinence.

Pregnancy and childbirth can cause urinary incontinence through hormonal changes, damage to tissues or nerves. Damage to the pelvic floor occurs particularly in long labours, instrumental deliveries (the use of forceps or vacuum extraction) and in the delivery of large babies.

Menopause and ageing increases the likelihood of urinary incontinence. The female hormone oestrogen plays an important role in maintaining the strength of the pelvic floor. At menopause, a woman's oestrogen levels decrease and, as a result, the pelvic floor becomes weaker. The lack of oestrogen at this time often exacerbates existing damage that may have occurred as a result of childbirth or other factors. The pelvic support structures also relax due to the natural ageing process.

Raised pressure in the abdomen can lead to urinary incontinence. Factors such as chronic



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coughing, lifting of heavy objects and obesity all place pressure on the pelvic floor. If these pressures are sustained over a long period of time they can weaken the pelvic floor.

Poor bladder habits--such as going to the toilet when it is not really required--has the effect of irritating the bladder muscle, causing it to spasm before the bladder is full. This results in the bladder becoming less able to hold a normal quantity of urine.

Urinary tract infections and the associated inflammation of the bladder and urethra, may lead to urinary incontinence.

The side effects of medications such as blood pressure medications, cold remedies, sedatives, painkillers, diuretics, antihistamines and antidepressants may be urinary incontinence.

Other medical problems--such as a stroke, bladder tumours, diabetes, Parkinson's disease, Alzheimer's disease, multiple sclerosis and spinal injury--can all cause urinary incontinence.

Constipation can contribute to incontinence. A full bowel can press on the bladder obstructing the flow of urine or affecting the bladder capacity making a person feel they need to go to the toilet more frequently. The straining often associated with constipation can also damage the nerves which feed messages to the pelvic floor muscles, causing the muscles to weaken.

Being overweight results in the pelvic floor muscles having to carry a heavier load.

Food and beverages such as caffeine, alcohol, artificial sweeteners, carbonated beverages, citrus juices and citrus fruit, greasy or highly spiced foods and tomatoes and tomato based products can all irritate the bladder.

Mobility and accessibility are factors in the development of incontinence. If a woman has restricted mobility due to arthritis or other disabilities she may find it difficult to reach the toilet in time. The inconvenient positioning of the toilet in the household can also be a contributing factor (eg. toilet located downstairs)

Genetic and hereditary factors can also contribute to urinary incontinence.

### **Are there different types of urinary incontinence?**

There are several different types of urinary incontinence, each with different causes and



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treatment options. The most common forms are:

**Stress incontinence** is the involuntary loss of urine with activities such as coughing, sneezing, laughing, lifting heavy objects or during physical activity. Stress incontinence often results from weakened pelvic floor muscles which support the bladder.

**Urge incontinence** describes a sudden and urgent desire to urinate and an inability to hold the urine until a toilet is reached. Urge incontinence is caused by the involuntary contractions of an overactive bladder muscle.

Quite often, women will suffer a combination of urge and stress incontinence.

**Overflow** is characterised by an over distended bladder due to the bladder not emptying properly. Overflow incontinence occurs when the bladder is unable to sense that it is full (caused by damage to the nerve supply to the bladder, diabetes, drugs, multiple sclerosis) or because of an obstruction to the bladder opening. Women with overflow incontinence may only have a weak dribbling stream of urine or feel that they need to empty their bladder but cannot.

**Functional incontinence** results from the inability to reach a toilet on time due to poor mobility, poor dexterity, memory loss and/or the unsuitable positioning of the toilet in the building. This is more common in the elderly or disabled.

### How is urinary incontinence diagnosed?

The diagnosis of the type of incontinence commences with a careful history and physical examination, including the front and back walls of the vagina. A rectal examination may also be performed. The woman may be asked to cough or push down during the examination to help look for prolapse and potentially identify stress incontinence. Special tests called urodynamics may be performed to determine how the bladder works during the filling and emptying of the bladder. This will allow for an accurate diagnosis and appropriate discussion of treatment options.

### What are the treatment options?

There are a range of treatment options available for urinary incontinence. The most appropriate treatment will depend upon the type of incontinence, the severity, the age of the woman, her state of health and whether she wishes to have a child or further children. Treatment can generally be divided into two types, non-surgical and surgical. Doing nothing is an option too. The problem of incontinence is hard to predict--it may remain the same, get



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worse, or improve over time.

## Non-surgical treatment

Reducing pressure placed on the pelvic floor can help. For mild incontinence, simple measures such as losing weight (if overweight), avoiding lifting heavy objects and treating conditions like chronic coughing and constipation may alleviate some symptoms

There are physiotherapy exercises designed to strengthen the pelvic floor muscles. They improve symptoms in most women with urinary incontinence

Hormone replacement therapy has not been shown to help significantly with symptoms of urinary incontinence. Topical low-dose oestrogen cream may be of some benefit when the tissues around the urethra are very thin and dry

A variety of drugs are used in the treatment of incontinence. Drugs such as Ditropan, Oxytrol, Tolterodine relax the bladder muscle and therefore increase the capacity of the bladder to hold urine. They can cause side effects such as dry mouth, constipation and confusion but these are less common with the newer drugs.

## Surgical treatments

If non-surgical treatment options do not provide sufficient relief from symptoms, an operation may be required. There are various surgical procedures and approaches to treat urinary incontinence:

**mid-urethral sling procedure.** These procedures (e.g. TVT, MONARC) are the current standard treatments for urinary stress incontinence. They are performed under local or regional or general anaesthetic. Small incisions are made in the vagina and the abdomen/groin and a permanent tape is introduced into the vagina to sit under the urethra. Most women (85-90%) are cured by this operation but there is less data of its success in the longer term (>10years)

**Burch colposuspension.** This is the traditional operation for incontinence. A 15-20 cm cut is made in the lower abdomen, usually below the bikini line from one side to the other (similar to the cut made for a caesarean section). Sutures are used to suspend the vagina from the pelvic side wall, creating a cradle of threads, like a hammock, from back to front of the pelvic area to provide support for the neck of the bladder. This operation has a proven long-term success rate of 85%. This procedure is also sometimes performed via keyhole surgery.



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### What are the risks of undergoing these procedures?

Although the risks associated with surgical procedures for incontinence are low, you should be aware that every surgical procedure has some risk.

There are some specific risks to be aware of in relation to these operations

Operations for treating stress incontinence have a 85-90% success rate, however these procedures are less effective if you have had surgery for incontinence before.

About five to ten in every 100 women have trouble emptying their bladder properly. For a short time it may be necessary to re-insert the catheter. Sometimes we may need to teach you how to insert a catheter yourself to completely empty the bladder. This does not seem to be a long term problem.

Around 10-15 out of every 100 women will find that (although dry) they now have to rush to the toilet quickly whenever they have an urge to pass urine. This does usually settle but it may require some ongoing therapy to improve this.

In rare cases, the body may reject the sling, or stitches can get infected or may wear away.

Some women get bladder infections after surgery. If this occurs, it can be treated with antibiotics.

Nearby organs such as the bladder or the ureter(s) (tube leading from kidney to bladder) may be injured. Further surgery may be needed to repair the injuries. A catheter may be put into the bladder to drain the urine away until the bladder is healed.

There are some general risks inherent to all operations:

Small areas of the lungs may collapse, increasing the risk of chest infection. This may need antibiotics and physiotherapy.

Clots may form in the legs leading to pain and swelling. In rare cases, part of this clot may break off and go to the lungs which can be fatal.

You may suffer a heart attack or stroke because of strain on the heart. In extremely rare cases, death is a possibility in anyone undergoing an operation.



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Some women however are at an increased risk of complications:

Women who are very overweight have an increased risk of wound infection, chest infection, heart and lung complications and blood clots.

Smokers have an increased risk of wound and chest infections, heart and lung complications and blood clots.

## What should I do before the procedure?

Any tests or referrals arranged at outpatient stage should have been completed.

You should continue your regular medications, unless advised otherwise.

Stop smoking.

Should you develop an illness prior to your surgery, please contact your doctor immediately.

## What should I do on the day of the procedure?

Unless otherwise specified, you should stop eating and drinking at the following times on the day of the surgery:

- at midnight for a morning procedure
- at 6am for an afternoon procedure.

You should continue all your usual medications, unless otherwise specified. You should shower and remove any body jewellery.

You should bring:

- toothbrush/paste/toiletries
- nightgown
- underwear
- sanitary pads



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- all usual medications
- all X-rays.

### What should I expect after the procedure?

When you wake from the anaesthetic, you will be in the recovery room. If you undergo a midurethral sling procedure, you should be able to leave the next day. You should plan to have someone take you home and stay with you. It is common to feel sick for a day or two after surgery. The drip will be removed from your arm when you are able to take food and fluids by mouth and you are no longer feeling sick. The catheter in your bladder will normally be removed the next day when you are able to move around comfortably. You may have stitches covered by a dressing. Your doctor will advise you when these are all to be removed.

You will be given specific discharge medication if required, but you may use Panadol or Panadeine as required (one to two tablets every four hours up to a maximum of eight tablets per day).

After discharge from hospital, you should:

- Eat and drink normally
- Remain mobile
- Use sanitary pads (not tampons) if required
- Shower normally (in preference to bathing)
- Rinse any wounds gently
- Avoid constipation.

You should NOT:

- Undertake any unsupervised activity on the day of the procedure
- Cover the wound unless oozing
- Have intercourse for two weeks
- Undertake any heavy exercise, lifting or straining for one week
- Drive until you can comfortably operate foot pedals or change gears.
- You will require some time off work, depend on the nature of your work. Sutures are normally dissolvable and do not require removal.

### What if I have any problems?



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You should seek medical attention if you experience:

- Fever or feeling unwell
- Offensive vaginal discharge or heavy bleeding
- Wound becomes hot, painful or discharges offensively
- Severe nausea or vomiting
- Inability to empty your bladder or bowels
- Severe pain.
- Please contact our Gynaecology Case Manager or attend the Mater Emergency Department if you require urgent attention.