PELVIC ORGAN PROLAPSE

Pelvic organ prolapse is a very common condition among women, particularly those who have had children and older women. It is estimated that half of all women who have children will experience some form of prolapse in later life, which may or may not cause them problems. Many women are completely unaware that they have a prolapse and may never seek help.

Prolapse is not life threatening, but it can be life changing for those who experience associated symptoms. There are a lot of precautionary measures you can take to try to prevent pelvic organ prolapse. All women should do regular pelvic floor exercises to maintain good pelvic floor muscle function and pelvic organ support. Although surgery may be indicated for some women, there are other treatment options which you may wish to consider before embarking on surgery.

The information on this website explains the different types of prolapse that can occur and aims to provide you with information about causes, diagnosis, treatment options and prevention, as well as what you can do to help ease your symptoms. Don’t try to cope with this problem on your own. Discuss it with your doctor to be referred to have it properly investigated and treated.

WHAT IS A PROLAPSE?

The word ‘prolapse’ means ‘slipping forth’, and in the pelvic region it describes the ‘falling down’ of one, or more, of the pelvic organs (womb, bladder or bowel). This is caused by a lack of support from any one, or more, of the components of the pelvic floor (muscles, nerves, connective tissue or ligaments).

HOW COMMON IS PROLAPSE?

Prolapse is more common in women who have had children and older women. Around 52% of women who have had at least one child have some degree of prolapse on examination and about half (50%) of all women over the age of 50 years complain of symptoms of prolapse. It is estimated that eleven percent (11%) of women will require surgery for prolapse by the age of 80 years. One third (30%) of all hysterectomies in postmenopausal women are performed for prolapse.

WHAT CAUSES PROLAPSE?

Prolapse is rarely caused by one single event, but rather the cumulative effects of lifestyle, work and inheritance. A few most common causes for prolapse are listed below.

1. Genetic factors

Collagen is a natural protein that helps keep tissues healthy and supple. Without it the pelvic floor is weak. Women with a genetic collagen deficiency (Marfan Syndrome or Ehlers-Danlos syndrome) have an increased risk of prolapse even if they don’t have any other risk factors. Other indicators of connective tissue weakness include hypermobility (double-jointedness), red hair, including pubic hair, fair skin and stretch marks.
2. **Ethnicity / Racial differences**

Studies have shown a higher incidence of prolapse in White women than Asian and African women identified by physical examination, and White and Latina women were four to five times more likely to report symptoms of prolapse compared to African-American women. There is little information about the incidence of prolapse in women of other (or more specific) ethnic groups.

When we look at these figures it is important to consider cultural attitudes towards prolapse symptomatology and report, as some women do not interpret what they feel as abnormal, perhaps assuming that a certain amount of discomfort and/or even pain does not indicate a problem. In some cases women may not be given permission by husbands and/or families to seek medical help for such conditions and this lack of reporting influence known figures of prolapse prevalence. True prevalence figures may never be known due to underreporting for various reasons.

There is some evidence for anatomic and physiologic variation in the pelvic floor that may affect risk of pelvic organ prolapse. Howard et al. (2000) suggested African-American women may have increased strength and pelvic muscle mass compared with white women.

3. **Pregnancy and childbirth**

Pregnancy is thought to be the main cause of pelvic organ prolapse (POP), whether the prolapse occurs immediately after pregnancy or several years later. The growing weight of the baby together with the softening effect of relaxin, a pregnancy hormone, both contribute to the increased vulnerability of the pelvic floor.

Increased intra-abdominal pressure and the progestogenic (hormonal) effect of pregnancy, followed by the damage from labour and delivery, and the adverse effect of breastfeeding, all contribute towards possible pelvic floor damage, not only in the muscles and ligaments, but also of the nerves in the pelvic floor.

Exacerbating factors include a large baby, long labour, rapid delivery, the use of forceps or extraction devices (ventouse delivery) and difficult presentation (breech). Although it is believed that most of the damage is done with the first delivery, women who have more than one child, whether the delivery is vaginal or by caesarean section, have a higher risk of prolapse than women who have one child or no children at all. Caesarean section is therefore not necessarily protective of the pelvic floor. Pregnancy in itself put the pelvic floor at risk.

Women who have children in close succession are at greater risk of prolapse because the muscles and ligaments are under constant strain and do not have enough time to recover in between the pregnancies. Women who have their babies at a later age are also more at risk of pelvic floor damage and pelvic organ prolapse.

4. **Breastfeeding**

The adverse effect of breastfeeding on the pelvic floor is an important factor to consider in new mothers, but is very much ignored under the current pressure for mothers to breastfeed for extended periods of time. We have previously mentioned that the pelvic tissues are oestrogen sensitive. Breastfeeding lowers oestrogen levels, which affects pelvic floor elasticity and support, leaving the pelvic floor vulnerable to cope with the extra workload associated with caring for a new baby.
Although most women want to shed the excess weight of pregnancy as soon as possible after delivery, it is important to consider the vulnerability of the pelvic floor during the time of breastfeeding.

5. **Ageing and the menopause**

Our muscles weaken as we grow older and the pelvic muscles are no exception. Although tissue damage is likely to have been caused much earlier, the ageing process further weakens the pelvic floor muscles. The natural reduction in oestrogen after the menopause also causes the pelvic floor muscles to become less elastic.

6. **Lifestyle and exercise**

Heavy lifting and manual labour appear to be related to pelvic organ prolapse. Poor technique in performing heavy lifting may also play a role. Sports such as weight lifting, long distance running and high impact activities (e.g. basket ball, gymnastics, parachute jumping and trampolining) increase the incidence of prolapse especially in women who are susceptible.

7. **Constipation**

Repeated straining to open your bowels will stretch and weaken the pelvic floor muscles and ligaments, and can even cause abnormal function of the nerves in the pelvic floor. Occasional constipation is unlikely to have a serious effect on your pelvic floor, but long-term constipation, even as a young adult, is associated with an increased risk of pelvic organ prolapse.

8. **Chronic disease**

Chronic illnesses that result in constant stress and strain on the pelvic floor are often quoted as a predisposing condition for pelvic organ prolapse. These include chronic obstructive pulmonary disease (COPD), cystic fibrosis, chronic cough and obesity.

9. **Previous pelvic surgery**

Past surgery to correct incontinence or hysterectomy may lead to defects in other pelvic compartments and increase the risk of developing prolapse. However, everything should not be blamed on surgery. Other factors such as the natural ageing process and oestrogen withdrawal following the menopause may also have an important role.

10. **Spinal cord conditions and injury**

Spinal cord injury and conditions such as muscular dystrophy and multiple sclerosis, can paralyse the pelvic muscles or restrict movement. As a result the muscles waste away and cannot support the pelvic organs. This significantly increases a woman’s risk of prolapse.
WHAT TYPE OF PROLAPSE DO I HAVE?

There are a number of different types of prolapse that can occur and these are named according to the organs that are affected. The severity / degree of prolapse can be classified as mild, moderate or severe.

The different types of prolapse can be divided into three categories: prolapse of the front (anterior) wall of the vagina, back (posterior) wall of the vagina, or top of the vagina. It is not uncommon to have prolapse in more than one compartment of the pelvis or vagina.

PROLAPSE OF THE FRONT (ANTERIOR) VAGINAL WALL

- **Cystocele (bladder prolapse)**
  Weakness in the front wall of the vagina will cause the bladder to fall down into the vaginal cavity, presenting like a bulge from the front in the vagina.

  This type of prolapse may interfere with the way your bladder works and may prevent you from emptying your bladder completely, causing symptoms of frequency, urgency and recurrent bladder infections.

PROLAPSE OF THE BACK (POSTERIOR) VAGINAL WALL

- **Rectocele (prolapse of the rectum or large bowel)**
  Weakness in the back wall of the vagina gives less support to the rectum (large bowel), which then bulges into the vaginal cavity presenting as a bulge from the back. A rectocele is different from a rectal prolapse (when the lining of the rectum falls out of the anus).

  A rectocele may affect the way your bowels work and create a pocket which may prevent you from clearing your bowel effectively. If you do not empty out the contents of your rectum, you may experience leakage of faeces or soiling of your underwear. Some women have to support the bulge with their hand over the perineal area, or use a finger in the vagina, to enable them to completely empty their bowels.
PROLAPSE FROM THE TOP OF THE VAGINA

- **Uterine prolapse**
  Uterine prolapse is when the womb (uterus) drops down into the vagina.

- **Vaginal vault prolapse**
  When a woman has had a hysterectomy (i.e. her womb has been removed), the top of the vagina is then called the ‘vaginal vault’ or apex. The vaginal vault can drop down into the vagina and this is called a vaginal vault prolapse.

CLASSIFICATION OF THE SEVERITY OR DEGREE OF PROLAPSE

- **Grade 1 (mild)**: the organ has dropped slightly, but is still within the vagina. *At this stage many women are unaware that they have a prolapse and usually do not have any symptoms associated with the prolapse.*

- **Grade 2 (moderate)**: the organ has dropped further into the vagina and can be seen at the entrance of, or just outside, the vaginal opening.

- **Grade 3 (severe)**: most of the organ or bulge has fallen through the vaginal opening. *This is the most severe form of prolapse and usually requires surgery. In the case of uterine prolapse, it involves a hysterectomy (removal of the womb).*
WHAT ARE THE SYMPTOMS OF PROLAPSE?

Depending on the type and severity of prolapse you may or may not experience symptoms. Quite often it is only discovered by chance that a woman has a prolapse, e.g. during a vaginal examination for a smear test, and she may be completely symptom-free. However, for those who suffer with symptoms associated with prolapse, it can severely affect their quality of life. The type of symptoms experienced depend on the type and severity of the prolapse:

Vaginal / general symptoms

- Sensation of pressure, fullness or heaviness in the vagina or pelvic area
- Sensation of a bulge in the vagina or ‘something coming down’ the vagina
- Seeing a bulge or something coming out of the vagina.
- Difficulty retaining tampons
- Low backache which may become worse after standing for long periods of time or towards the end of the day.

Urinary symptoms

- Leaking urine
- Frequency (going to the toilet often)
- Urgency (having to rush to the toilet)
- Feeling of incomplete bladder emptying
- Weak or slow urinary stream / flow
- The need to support or reduce the bulge before voiding
- The need to change position to start the flow or completely empty your bladder
- Recurrent urinary infections due to incomplete emptying

Bowel symptoms

- Constipation or straining
- Urgency of stool
- Leaking stool or difficulty controlling flatus (wind)
- Difficulty clearing your bowels or a feeling of incomplete emptying. You may feel the need to reduce the bulge with your hand or fingers in the vagina, or insert your finger in the back passage (digital evacuation) to remove faeces.

Problems with sexual function

- Loss of vaginal sensation
- Vaginal laxity
- Pain on penetration (dyspareunia)
- Vaginal flatus (wind trapped in the vagina)

Many women with pelvic organ prolapse are completely symptom-free, but for those who have symptoms it can disrupt their day-to-day life and be physically and emotionally challenging to cope with.
HOW IS PROLAPSE DIAGNOSED?

Examination

It is important to take a history of your symptoms and the effect these have on your daily life. Your medical history, type of work you do and the activities you undertake may help to identify contributing factors for developing prolapse.

You will then have an internal vaginal examination to determine what type of prolapse you have and how severe it is. You will have to give your consent for the examination, but you maintain the right to stop the examination at any time. You may be examined while lying and also while standing, and you may be asked to cough or bear down (strain) during the examination to see the true extent of the prolapse. If you have bowel symptoms you may also need to have a rectal examination, where one finger is inserted into your rectum (back passage), but this is only done when absolutely necessary and you can decline having a rectal examination.

Investigations

Sometimes further tests may be needed to investigate your prolapse.

- If you have urinary symptoms you may be asked for a urine sample, have a bladder scan and undergo urodynamic studies (tests to evaluate your bladder function). You may have urodynamics even if you do not have any bladder symptoms, because your prolapse may be masking stress urinary incontinence by pushing against your urethra or create a kink / bend in the urethra, thereby preventing urine from leaking when you cough or exercise. In this case, repairing your prolapse may fix one condition but leave with you another - incontinence, but incontinence can be treated too.

- You may also need a transvaginal ultrasound scan (TVS) and/or imaging of your upper urinary tracts (renal tract ultrasound or intravenous urogram) to rule out any other abnormalities in the pelvic area or kidneys.

- If you have bowel symptoms, further investigations may be required, such as anal manometry (to assess how well your anal sphincter works), defecatory proctogram (using X-ray imaging to look at the way you open your bowels) or endoanal ultrasound scan (to see if your anal sphincter is intact). You will referred to a colorectal specialist for this.

PREVENTION OF PROLAPSE

As previously explained, a prolapse is caused by weakness in the pelvic floor support. Before we think about treatment, we need to consider what you can do to prevent a prolapse in the first instance, or prevent an existing prolapse getting worse. Conservative treatment (any treatment that does not involve medications or surgery) cannot reverse the damage that was done, but may relieve symptoms of the dragging and discomfort you experience, giving a sense that ‘things have gone back up’. Below are a few lifestyle suggestions that may help:
- **Constipation:** Avoid becoming constipated by following a healthy high fibre diet, with plenty of green vegetables and fruits, and drink enough fluids (1.5 litres per day is recommended). Eat regularly to stimulate your metabolism and bowels. Skipping meals can lead to an irregular bowel habit. Try to do 20-30 minutes of exercise a day as this can also improve your bowel habits. If possible, do not put off the urge to open your bowels as the stool will become hard and dry, making it difficult to pass.

- **Coughing:** If you suffer with a condition that makes you cough a lot (e.g. bronchitis, bronchiectases, asthma, cystic fibrosis, etc.) you can be referred to a respiratory physiotherapist who can advise you on breathing exercises and more effective coughing or ‘huffing’ techniques. It may also help to sit down when you cough, if possible. If you smoke, try to stop smoking or cut down. If you need help, you can contact your local ‘Stop Smoking Clinic’ for advice and support.

- **Standing:** Avoid standing for long periods of time. Gravity tires the pelvic floor muscles and pulls the prolapse further down. Many women find their symptoms get worse when they stand for long periods or towards the end of the day, and improve when they lie down. Find some time to lie down during the afternoon and put your feet up. Raise your hips slightly higher than your head with a pillow under your bottom, or raise the foot-end of the bed if possible. You could use the time to read, make ‘to-do’ lists, call a friend or just relax.

- **Lifting and manual labour:** Avoid heavy lifting and manual labour where possible. Looking after babies and toddlers can be very strenuous. Be careful with lifting suitcases while travelling and consider buying a smaller size suitcase with wheels. Avoid moving furniture around or turning mattresses on your own.

  It is good practice to test the weight of any object, including children, before you attempt to lift or move it. Ask yourself the following questions:

  1. Is it light enough to lift or move with one arm?
  2. Can you continue a conversation, without changing your voice, while lifting or moving the object?
  3. Can you breathe normally while lifting or moving the object?
  4. Can you lift or move the object without using tensing your neck muscles or pulling a face?

  If you can answer ‘YES’ all if the above, it is probably safe to lift providing that you bend your knees, keep your back straight and pull up your pelvic floor muscles before shifting the object for additional support. Keep the object close to your body to minimise the strain on your pelvic floor. If it is too heavy for you to do on your own, ask someone else for help.

- **Housework:** Plan your housework so that you do not have to do it all at once, and try not to do too much at the end of the day when you are already tired. You can ask your family to help out or set up a rota for yourself so that you do not have to do it all in one day. If you had a long day, try to sit down while you prepare dinner.

- **Shopping:** Avoid carrying heavy shopping bags. Use a trolley rather than a basket while shopping and make sure the wheels run smoothly. If you use public transport, do smaller amounts of
shopping at a time and consider getting a wheelybag to take your shopping home. Try online shopping for groceries and have it then delivered to your house.

- **Keep-fit exercise:** Although keeping fit is important for your health, certain exercises put more strain on your pelvic floor and are best avoided. High impact exercise such as trampolining, skipping, aerobics, running, horse riding and racquet sports, tire and stretch the pelvic floor muscles and are therefore not recommended. Exercises that will raise intra-abdominal pressure, such as sit-ups, weight training and exercises where you lift both legs off the ground at the same time in the lying position, will push the pelvic floor down and can weaken these muscles over time. Suitable alternatives include swimming, cycling, walking, pilates, yoga and low impact aerobics.

- **Sexual intercourse:** Penetrative intercourse will not make your prolapse worse, but some women report pain or discomfort on penetration or a lack of sensation due to vaginal laxity. To make penetration more comfortable, use a lubricating jelly (Replens or Sylk) and experiment with different positions to find which ones are more comfortable for you and your partner. Pelvic floor muscle exercises may improve your muscle tone and sensation with intercourse, but it will not completely resolve vaginal laxity.

- **Obesity:** If you are overweight, losing weight will decrease the strain on the pelvic floor and may improve your symptoms of prolapse. If you struggle to lose weight, ask your doctor to refer you to a dietician for advice on healthy eating. Discuss ‘healthy ways to exercise’ that will not impact on your pelvic floor.

**HOW IS PROLAPSE TREATED?**

There are a number of options available to treat prolapse, both non-surgical and surgical. The choice of treatment depends on a variety of factors such as the type and degree of prolapse you have, the severity of your symptoms, your age, whether or not you want to have children in the future, your general health and also your personal preference.

**NON-SURGICAL TREATMENTS**

- **Physiotherapy**
  Pelvic floor muscle exercises will not reverse the prolapse, but may help to improve the symptoms you experience, such as dragging, incontinence and backache, and could help to prevent the prolapse getting worse. We will talk about your day-to-day life and keep-fit activities to help you identify potential risk factors and then discuss ways to avoid or change these to minimise the impact on your pelvic floor.

- **Hormone replacement therapy (HRT)**
  The tissues in the pelvic region are sensitive to oestrogen and may become weakened at times of low circulating oestrogen, i.e. post-menopausal women and women who breastfeed longterm. These women may benefit from HRT in the form of oestrogen, which will help increase the collagen levels in your body and improve the tissues in the pelvic region, in particular the vaginal walls, for better support.
Local oestrogen supplements, in the form of a vaginal cream (Ovestin) or vaginal tablets (Vagifem), can be prescribed. Very little oestrogen is absorbed in the bloodstream and local preparations therefore cause virtually no side-effects. In some cases local oestrogen cream (Ovestin) may be prescribed for breastfeeding mothers who suffer with prolapse and/or vaginal dryness, to use until their periods have returned to normal.

- **Vaginal pessary**
  A vaginal pessary is a plastic or rubber ring, similar to a diaphragm or cervical cap, that is inserted in the vagina to support the prolapsed organ by pushing it up and back into place, and aims to relieve associated symptoms of prolapse. Pessaries are made of latex or silicone and come in different shapes and sizes. Ring pessaries are the most commonly used, but may not be right for every woman.

Pessaries need to be individually fitted and it may be a matter of trial and error, trying different shapes and sizes, to find the one that is right for you. The right size pessary will feel comfortable when it is inside the vagina and not fall out when you walk, cough or bend. It should not interfere with emptying your bladder or bowels. You may, however, need to give some support on your perineum when you open your bowels to prevent the pessary from coming out when bearing down. Some pessaries may interfere with sexual intercourse, while others may cause no significant interference. A ring pessary may be left in place during sex if it is comfortable for you and your partner, but some women prefer to take it out before intercourse and put it back in afterwards. Your GP, nurse or women’s health physiotherapist can show you how to do this.

If the pessary is relieving your symptoms and you are not having difficulties with it, you will need to have it changed or washed every six months for hygienic reasons. This can usually be done by your general practitioner or nurse. Some women learn how to insert and remove the pessary themselves to clean it. If you have any difficulties with the pessary or if you have any unusual discharge, bleeding or pain, contact your doctor immediately.

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**Who will use pessaries?**

Pessaries are generally recommended as treatment for women with bothersome prolapse who

- want more children in the near future
- are pregnant
- are unfit for surgery
- do not wish to have surgery
- are on the waiting list for surgery but have bothersome symptoms
Some women use pessaries for years to manage their prolapse instead of having surgery, although it relieves the symptoms of prolapse it does not necessarily prevent the prolapse getting worse. There are however situations where surgery are indicated and your doctor will discuss this with you.

**SURGICAL TREATMENTS**

Where conservative measures have failed to relieve your symptoms or in severe cases of prolapse, surgery may be indicated. Most of the surgical treatments for prolapse aim to lift the prolapsed organ back into place and repair the defect. Hysterectomy (for uterine prolapse) is the only treatment that removes the prolapsed organ altogether. Surgery can be performed abdominally or vaginally, and your doctor will discuss the options with you.

Whether or not you need surgery depends on

- how the prolapse affects your bladder and bowel function
- how much discomfort you experience from it and
- how much these symptoms impact on your quality of life

The choice of surgery depends on

- the type of prolapse you have
- your health and age
- whether you want to keep your uterus (womb) or not
- whether you wish to have children in the future
- whether you are sexually active.
- the outcome of the investigations you may have

As with all surgery, the degree of success depends on many factors and surgery is not entirely risk free. While surgical treatment may be successful for one woman, it may have disappointing results for another. Surgery may not relieve all of your symptoms, and in some cases cause other problems, such as unmask stress incontinence or cause painful intercourse (dyspareunia), but for the majority of women surgery for prolapse is straight forward and easy to recover from. Ask your doctor for more information on recovery after surgery.

Although surgery offers the best chance of long-term cure for prolapse, it is not a guarantee that you will never have prolapse again. Statistics show that one in three women (30%) who have surgery for prolapse go on to have further surgery in the future. This highlights the importance of assessing any risk factors in your lifestyle which you should try to avoid, and to maintain good pelvic floor muscle strength by doing regular exercise, before and after surgery, for the rest of your life.