

Pelvic Organ Prolapse

A/Professor Alan Lam MBBS (Hons) FRCOG FRACOG Director

PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGA PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGA PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGAN PROLAPSE PELVIC ORGA

What is pelvic organ prolapse?

The pelvic organs include the bladder, the uterus, vagina and the rectum. These organs require an intact system of active pelvic floor muscles, strong connective tissues, healthy blood vessel and nerve supply to function properly and to stay in place.

Damage to any of this intricate system can weaken the pelvic floor muscles and stretch or tear the connective tissue mesh work. The organs may then become displaced from the normal position resulting in prolapse. Such damage may also cause these organs to malfunction leading to a variety of symptoms.

What causes pelvic floor damage?

Childbirth injury is by far the commonest cause of pelvic floor damage. Other contributing factors include menopause (loss of oestrogen), chronic constipation, recurring coughing, or previous pelvic surgery such as hysterectomy.



How common is pelvic organ prolapse?

Some forms of pelvic organ prolapse or functional disturbance are probably present in many women who have sustained childbirth damage. Research has shown that one in three women over 50 has some degree of pelvic organ prolapse. In most cases, the prolapse is mild and progresses slowly with age, manifesting only later in life. By 80 years of age, one in ten women will have undergone surgery for prolapse, and of this one in three may develop recurrence necessitating further corrective surgery.

What are the types of prolapse?

Prolapse can affect the bladder, the uterus, the vagina or the rectum. This may occur separately or at the same time. The types of prolapse refer to the organ which protrudes onto the vaginal wall.

Some common terms used to describe prolapse are:

Cystocoele:

bladder prolapses onto the front wall of the vagina.

Rectocoele:

rectum prolapses onto the back wall of the vagina or the perineum.

Uterine prolapse:

uterus prolapses into the vaginal canal.

The extent of prolapse is often classified as mild, moderate or severe.

What are the symptoms of prolapse?

Many women with mild prolapse do not have any symptoms and are totally unaware of the presence of prolapse. As the prolapse progresses, depending on the organ which is involved, women may notice a combination of the following symptoms:

General:

- dragging feeling or heaviness in the vagina
- a soft lump or bulge through the vagina
- low back pain.

Bladder:

- urinary incontinence urgency, stress
- voiding difficulties hesitancy, slow flow, incomplete emptying
- urinary infection.

Bowels:

- difficulty with bowel movements straining, incomplete emptying, at times needing to apply pressure into the bulge to empty the bowels
- constipation
- faecal incontinence.

Sexual symptoms:

- discomfort or pain
- looseness
- reduced sexual sensation.

Prolapse can affect the bladder, the uterus, the vagina, or the rectum. This may occur separately or at the same time.

How is prolapse diagnosed?

Women with mild prolapse are often asymptomatic. The prolapse is noticed only at the time of annual pelvic examination. When prolapse is moderate to severe, symptoms often follow.

Diagnosis is made by history and pelvic speculum examination similar to when you have a PAP smear. The examination allows doctors to see the sites of the prolapse. At times, you may be asked to strain or cough in the standing position to demonstrate the maximum extent of the prolapse.

What tests are recommended in the assessment of pelvic organ prolapse?

Damage which results in pelvic organ prolapse may also cause disturbance to bladder or bowel control and function.

Depending on the types of symptoms and the organs which are affected, you may be advised to undergo some tests, such as urodynamic (study of bladder function) or ano-rectal physiological studies (study of rectal function and pelvic nerve conduction), or imaging tests such as x-ray and ultrasound. These tests help doctors assess the extent of the problems, determine the most appropriate method of treatment and predict treatment outcome.

How can pelvic organ prolapse be treated?

Most women with mild prolapse do not have symptoms and may not require any treatment. When symptoms are sufficiently troublesome to affect quality of life, or when prolapse is severe, treatments are available to improve your situation.

The choice of treatment depends on a combination of factors such as:

- severity and the types of the prolapse
- severity and types of symptoms
- effect on quality of life
- general health condition
- previous treatments types, outcomes
- experience and skills of the doctors.

Causes of pelvic floor damage include childbirth, constipation, heavy lifting, chronic cough, menopause, and previous pelvic surgery or hysterectomy.

Treatments are broadly divided into non-surgical and surgical options. These options are often complementary rather than exclusive of one another.

Non-surgical treatments for pelvic organ prolapse

- Pelvic floor exercises strengthening the pelvic floor muscles through active exercises may halt the progress of prolapse. If surgery is recommended, pelvic floor exercises should still be carried out before and after repair surgery.
- Correction of aggravating factors heavy lifting, chronic coughing, chronic straining due to constipation puts recurring pressure on the already damaged support tissues and nerve fibres. This can cause prolapse to progress and increase the risk of recurrence after repair surgery.
- Hormone replacement therapy the lack of oestrogen after menopause accelerates the degeneration of the pelvic connective tissue.
 Topical oestrogen is useful in maintaining the quality of this support tissue.
- Vaginal pessary a type of plastic ring inserted and left inside the vagina to support the pelvic organs. Pessary requires periodic removal, cleansing, and re-insertion. Pessary may be an

option for young women with severe prolapse who have yet completed child-bearing, women who are reluctant to consider surgery or unable to have surgery through ill health.



Surgical treatments for prolapse – pelvic reconstructive surgery

The aims of surgery are:

- to identify and repair the damaged connective tissues and pelvic floor muscles
- to restore the prolapsed organs to their normal position
- to improve or restore their functions to normal.

There are many different types of operations for pelvic organ prolapse. The choice of surgical procedure has widened overtime as new techniques and repair materials become available.

In general, pelvic reconstructive surgery may be classified according to:

- the route of surgery vaginal, abdominal or laparoscopic
- the location of the pelvic floor defects anterior (cystocoele), posterior (rectocoele), central (vault)
- the types of ligaments or bony landmarks to which the prolapsed organ is attached or suspended to (sacrospinous ligament – a ligament in the back part of the pelvis, sacrocolpopexy – describes a procedure in which the vagina is attached to the front of the sacral bone sacral ligament)
- the materials used in surgery patients native tissues, treated animal tissues, or man-made tissue (mesh).

The recommended method of surgery is often dependent on the surgical training and experience of the surgeon. Your doctor will help choose the most appropriate and successful procedure for your individual case.

Is hysterectomy necessary in pelvic reconstructive surgery?

Hysterectomy means removal of the uterus. Hysterectomy has traditionally been thought to be necessary for repair of pelvic organ prolapse. This idea is based on several assumptions such as:

- the uterus causes the prolapse to occur
- the uterus adds weight to the prolapse and therefore needs to be removed
- removal of the uterus causes no harm
- removal of the uterus is necessary to allow repair of the damaged connective tissues
- removal of the uterus improves the chances of long-term repair success.

In recent years, research, supported by extensive experience at CARE, has indicated that hysterectomy is not always necessary for successful surgical repair but may in fact cause further damage to the already damaged, intricate pelvic floor support structures, leading to higher chance of prolapse recurrence, disturbed pelvic organ functions, and higher risk of erosion of mesh materials where these are used in pelvic reconstructive surgery.

Many women suffering from pelvic organ prolapse, particularly those who have not completed

child-bearing or who have reservations or negative feelings towards hysterectomy, may therefore be relieved to learn that hysterectomy is not inevitable nor always necessary when considering surgery for prolapse repair.



What is the role of mesh in pelvic reconstructive surgery?

In recent years, new and specially designed soft meshes have become available for pelvic organ prolapse. These meshes can be introduced either vaginally, laparoscopically or abdominally to replace the damaged connective tissues. The premise is that non-absorbable, non-reactive meshes provide durable replacement materials and hence may improve the long-term cure for pelvic organ prolapse repair.

Short-term data from research has been promising, but long-term high quality data are still needed to confirm this.

What are the risks of pelvic reconstructive surgery?

The risks of pelvic reconstructive surgery are uncommon. In general, these can be divided into:

- risks related to the type of anaesthesia general, regional or local
- risks related to the route of surgery abdominal, laparoscopic or vaginal incisions
- risks related to surgery on the prolapsed organ
 or the adjacent organs punctures, lacerations,
 injuries, fistula to bowel, bladder, urethra, ureter,
 blood vessels or nerves may occur during the
 dissection to access the damaged tissues, during
 the introduction of the repair materials, or during
 the healing phase
- potential adverse reactions to surgically implantable materials/meshes – erosion, extrusion, inflammation, infection, painful scars, or fistula formation (the incidence of risks appears to be low, around three to ten percent).

Summary

Pelvic organ prolapse is a common condition affecting many women who have sustained childbirth damage. As prolapse tends to progress with age and as life expectancy improves, more and more women are affected and are seeking help for this condition.

Prolapse can affect any of the pelvic organs – the bowels, the bladder, the uterus. The condition usually manifests as a visible lump through the vagina with or without disturbances to normal bladder, bowel or sexual functions. While not lifethreatening, pelvic organ prolapse with associated functional disturbance can affect a woman's quality of life, body image and self-confidence.

Conservative and surgical treatment options are available. Hysterectomy is neither inevitable nor beneficial and can often be avoided. Modern surgical techniques and newly designed soft meshes have combined to offer women with pelvic organ prolapse minimal access surgical options and excellent long-term results.

At CARE, our highly experienced surgeons specialise in the management of pelvic organ prolapse. We have treated thousands of women, many of whom have been referred due to the complexity of their problems or previous unsuccessful surgical repairs. CARE is actively involved in clinical research with the hope of improving surgical outcome through development of modern surgical techniques and trials of newly designed implantable materials.

Patient services

Patients are referred to CARE specialists for treatment and management of the following conditions:

- endometriosis
- pelvic organ prolapse
- urinary incontinence
- uterine fibroids
- ovarian cysts
- menstrual disorders
- adhesions.

CARE locations





AMA House Level 4, Suite 408 69 Christie Street St Leonards NSW 2065 Phone: (02) 9966 9121 Fax: (02) 9966 9126 St George Private Hospital Level 4, Suite 7 1 South Street Kogarah NSW 2217 Phone: (02) 9966 9121

Fax: (02) 9966 9126



CENTRE FOR ADVANCED REPRODUCTIVE ENDOSURGERY

www.sydneycare.com