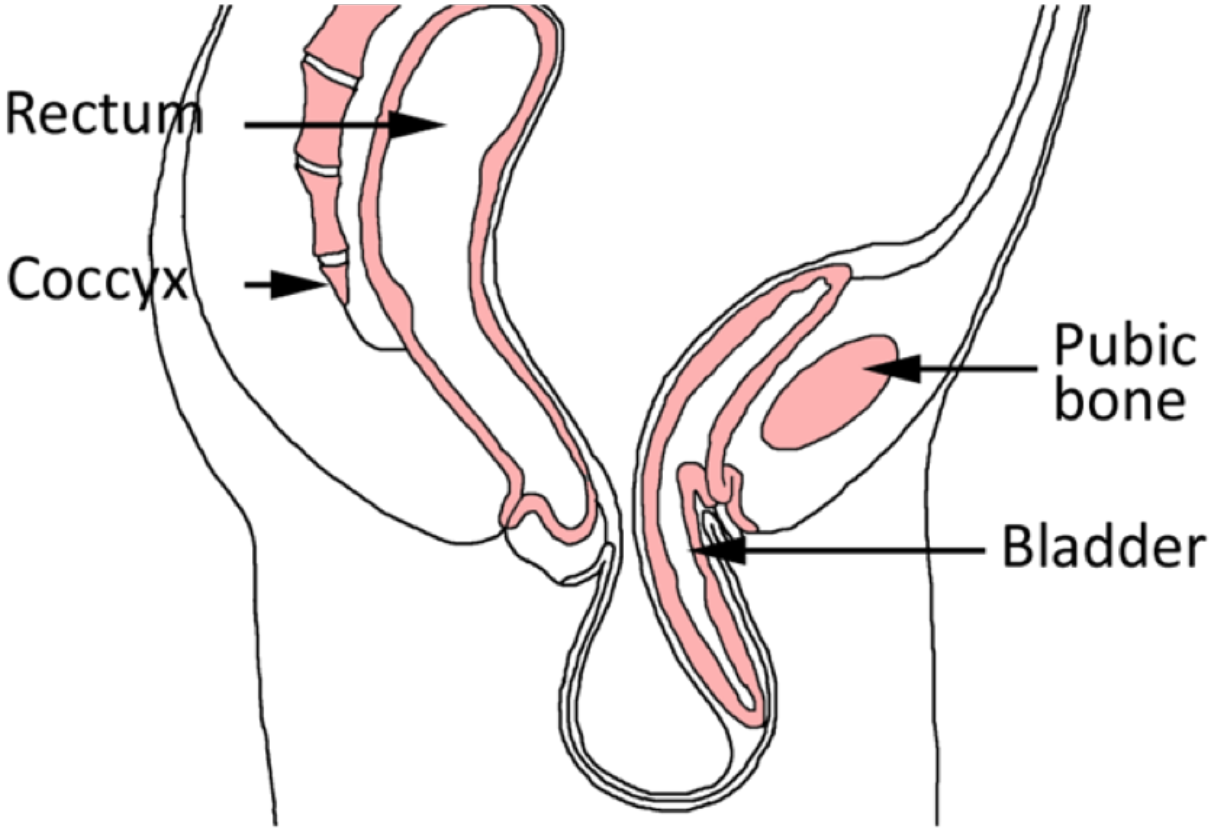
Vaginal Vault Prolapse

What is vaginal vault prolapse?

When the upper part of the vagina drops down from its usual position because of a failure of its supports, it is known as a vaginal vault prolapse. This is most often seen after a hysterectomy, although rarely it can be seen with the womb (uterus) still present.

It occurs in 1-5 women out of a 100 after a hysterectomy and is 2-3 times more common when a hysterectomy has been performed for uterine/uterovaginal prolapse. Vault prolapse can occur months to years after the operation

Imagine a sock being turned inside out (see figure) and the top of the sock is the top of the vagina (vault). When the top of the vagina drops, the degree to which it descends usually determines the grade of vault prolapse.



Vaginal vault prolapse

Often the bladder or bowel may be dragged down at the same time. So along with the vault prolapse, there may be associated vaginal prolapse known as a cystocele/urethrocele when the bladder is involved or an enterocele or rectocele when the bowel is involved. This may be seen in as many as 9 out of 10 women with a vault prolapse.

What are the symptoms of a vaginal vault prolapse?

In the early cases, there may be no symptoms at all. However, as the upper part of the vagina bulges out of the hymenal opening (introitus), symptoms are almost always present. These symptoms can sometimes cause a great deal of inconvenience and/or embarrassment to women.

There may be symptoms of feeling a lump down below, worse on prolonged standing or at the end of the day. The woman may notice that the lump reduces itself on lying down and that she sometimes must replace this lump to be able to empty her bladder or bowel completely. The lump may cause difficulty in walking and standing and sometimes can bleed because of vaginal skin ulceration. Rarely, the entire vagina may turn itself inside out dragging the bladder or bowel with it (complete vaginal inversion).

There may be bladder symptoms, including urgency, urge or stress incontinence (involuntary loss of urine), frequency of passing urine and a feeling of incomplete emptying.

Bowel symptoms include urgency and a feeling of incomplete evacuation.

There may be difficulty in having satisfactory sexual intercourse.

Backache and a dragging heaviness may also be presenting symptoms.

Why does vault prolapse occur?

In a small number of women, especially after a hysterectomy, the supports of the upper vagina (uterosacral and cardinal ligaments) give way but the exact cause for this has not been determined. Several risk factors, however, have been identified. These include

- Increasing age leading to reduction in tissue elasticity and collagen
- Menopause causing lack of oestrogen hormone
- Vaginal birth: Vaginal deliveries, especially difficult labours can cause lax vaginal tissues
- Increased body weight which increases abdominal pressure making vaginal vault

prolapse worse
- Inadequate surgical techniques in some situations may contribute
- History of pre-existing uterine or vaginal prolapse

A number of techniques exist to reduce the risk of vault prolapse at the initial surgery, but in spite of all measures taken to prevent this condition, vault prolapse can still occur because of a pre-existing pelvic floor defect, which is why vault prolapse is most common after hysterectomy for prolapse.

Is surgery the only answer?

Vault prolapse does not usually respond well to correction with a pessary. A vaginal pessary is a plastic ring or a shelf pessary (looks like a coat hanger) that can sometimes be used to hold the upper vagina up. As the supports for the upper vagina have failed, it is not surprising if a pessary can't help with supporting the vaginal walls and the top of the vagina manages to drop down in spite of the pessary. It is usually not suitable for younger women and sexually active women, as it can interfere with sexual activity. The ring needs to be changed regularly every few months to avoid ulceration and vaginal discharge.

What about pelvic floor exercises?

Pelvic floor exercises need to be continued as far as possible to strengthen the pelvic floor before and after surgery, but just doing them on their own will not reverse the vault prolapse.

What is a sacrospinous fixation?

This is an operation to surgically correct a vault prolapse by hitching the top of the vaginal wall (vault) or the cervix to a stable ligament (sacrospinous ligament) that runs from the pelvic bone (ischial spine) to the backbone (sacrum) and is part of the pelvic floor. This allows the procedure to be done without any external cuts and is done through the vaginal approach, hence allowing quicker recovery. A cut is made in the posterior vaginal wall to allow access to the sacrospinous ligament and delayed absorbable sutures are placed carefully in the ligament, avoiding important nerves and blood vessels.

Will any other repair be carried out at the same time?

Depending on the findings at surgery, repair of other associated prolapse such as a cystocele/rectocele or enterocele will be undertaken.

What is the failure rate of sacrospinous fixation?

The operation is successful in over 80% of women. The usual failure rate quoted in literature is 20%. That is 2 out of 10 women will need further surgery for a recurrent vault prolapse. This failure rate will depend upon individual surgeon's experience and may be much lower.

Usually, a different approach is chosen to correct recurrent vault prolapse and may involve an open abdominal or keyhole (laparoscopic) approach, often using a mesh.

Are there any other surgical procedures available to repair the vault prolapse?

Yes, there are procedures such as abdominal or laparoscopic (keyhole) sacrocolpopexy which use the abdominal route and often use a mesh (artificial material) to strengthen the prolapse. These procedures are only offered after careful counselling and case selection based on specialist advice, using an individualised management approach. Very old or infirm women may have a procedure where the vagina is closed off (colpocleisis). There is no absolute best surgical operation to correct a vault prolapse and the choice of surgery depends upon the patient's age, risk factors, need for sexual function, anaesthetic risks and the surgeon's experience and the patient's wishes.

What would happen if I did not have surgery?

Surgery to repair vault prolapse is elective surgery and should be considered only if the woman is symptomatic and fully understands the operative procedure and its attendant risks. Sometimes, a mild vault prolapse will need no intervention and may never become symptomatic, especially if normal body weight is maintained, heavy lifting avoided, and pelvic floor exercises are done regularly. However, most women usually present only when they have already developed symptoms, and these can get worse with time. Timing and decision for surgery will be carefully considered by detailed consultations between the patient and the surgeon, weighing the benefits and risks of surgery.

What are the possible risks of surgery?

Sacrospinous fixation is a safe procedure, but like any other major operation, comes with some risks. There may be a risk of infection, heavy bleeding (especially pudendal blood vessels) or nerve injury (damage to pudendal or sciatic nerves) but these risks are uncommon and usually occur in less than one in a hundred cases. A blood transfusion or an open operation (laparotomy) may be needed to control the bleeding. This is very rare. Very rarely, the stitch may have to be removed.

There is also a risk of bladder, ureter and bowel injury because of the proximity of these structures to the vagina. However, all possible precautions are taken to keep complications to a minimum (less than one in a hundred cases)

Some women (1 in 10 women) may have hip or buttock pain after the stitch is placed in the sacrospinous ligament. This will usually subside with painkillers and around 8-10 weeks after the operation.

If there is heavy bleeding or an offensive discharge after you return home and you are concerned, you must contact the hospital or your doctor, as you may need further attention or antibiotics.

Sexual function is usually much improved after a sacrospinous fixation as the length of the vagina is restored and maintained. However, very rarely it may be difficult to have successful intercourse because of too tight a repair.

Sometimes, a few months or years after the operation, an anterior wall prolapse (cystocele) may be revealed that was not apparent at the time of the surgery. This may need a further operation if it becomes symptomatic. Also, urinary stress incontinence that was previously not a problem may be revealed post operatively on correction of the vault prolapse. This will then need to be managed appropriately, depending on the symptoms.

Will I need to have a general anaesthetic for the sacrospinous fixation?

This will depend on a discussion between the anaesthetist and yourself, considering your risk factors, your wishes and your general health. It is possible to do this operation successfully using a regional anaesthetic (Spinal or epidural).

This is especially recommended when women are not particularly suited to have a general anaesthetic, for example elderly infirm women, chronic smokers or very overweight women. Most women however opt to go to sleep, but they then also may have a caudal anaesthetic (injection in your lower back) which helps with pain relief and to reduce blood loss.

Will I need a catheter and a vaginal pack after the sacrospinous operation?

Yes, an indwelling catheter will be left in the bladder for 1-2 days, depending on the extent of the repair. It will be checked that you are passing urine normally before you are discharged home. A vaginal pack to apply pressure and prevent post-operative bleeding may be inserted and is usually removed in 24 hours.

An intraoperative antibiotic is usually given to reduce your risk of infection.

A laxative may also be prescribed after surgery to avoid constipation and you should resume a healthy diet rich in fruit and vegetables to reduce your risk of developing recurrent prolapse in the future.

Early mobility after the operation and avoiding chronic cough will also help recovery. Stopping smoking will reduce coughing and hence reduce future risk of recurrence of prolapse.

Pre and Post Surgery Advice

What can I do to help myself before the operation?

Before any major surgery, it is advisable to try and get as fit for surgery as possible.

Getting fit: Try to do regular exercise including swimming, walking or going to the gym as this will go a long way in helping your recovery after your operation. This also means trying to lose weight if you are overweight (this helps post-operative recovery and reduces complications such as infection and anaesthetic problems that occur more frequently in overweight patients). Do take the advice of your doctor before you start any exercise programme so that you don’t hurt yourself.

Healthy diet: Do try to eat healthily and increase your intake of water, vegetables and fruit. Eat iron rich foods such as nuts, broccoli and green leafy vegetables and beans.

Do stop smoking, seeking advice from your doctor, as this affects healing as well as increases your chance significantly of anaesthetic problems, especially lung infections and breathing problems post operatively.

Do let your surgeon and anaesthetist know about the medications you are taking including homeopathic or alternative medicines as these can affect your operation adversely. You may need to stop them before your operation.

Do let your surgeon and anaesthetist know about any medical/anaesthetic or surgical information regarding yourself, as this may be helpful in avoiding problems during surgery and afterwards.

How long will I stay in hospital?

You will be discharged home in 24- 72 hours, depending on how you feel. If you have any surgical complications, you may stay in the hospital for longer. During your time in the hospital, you will be monitored for bleeding, infection and the nurses will help you become mobile as soon as possible. This reduces your risk of thrombosis.

Do I need to fast before the operation?

Yes, if you are having a general anaesthetic, no food, not even chewing gum should be consumed for at least 6 hours before your procedure. You can drink water up to 2 hours before your procedure. The hospital will advise you as to the timing of your procedure and guide you.

Do I need to stop my medications before my procedure?

You normally should not stop any of your essential medications. Please take your usual essential medications with a tiny sip of water at the regular time, unless advised not to by the nurse or doctor. Do remember to bring a list of all your medications to show the nurse at your pre-assessment (if you are having one) and let your admitting nurse and anaesthetist know all the medications you are on.

This is because your medications may influence your anaesthetic and surgery. You should also inform the nurse and anaesthetist of any allergies that you have to foods, metals, drugs etc. Some important notes on certain conditions are listed below.

DIABETES (insulin or tablet)

In general, you should not take your insulin injection or your tablet, when you are fasting. For example, if your operation is in the morning, DO NOT TAKE your morning dose or injection as you will be fasting overnight, but do take the previous dose as normal. If your operation is in the evening, take your doses as normal in the morning, but stop injection/tablets if you are taking any at lunchtime (you will fast for 6 hours).You can resume your normal regime, once you are eating and drinking normally. If in any doubt, consult your surgeon or anaesthetist.

ASPIRIN, WARFARIN, CLOPIDOGREL, CLEXANE or any blood thinning agent

You will need to stop most blood thinning agents such as Aspirin or Clopidogrel at least 1-2 weeks before your procedure. This is to avoid excessive bleeding at your operation. If you are on Warfarin or Clexane or any of the above blood thinners, you will need to liaise with your surgeon and if needed, your cardiologist. If in any doubt, consult your surgeon or anaesthetist and certainly inform them when you see them, as it may influence your management.

Will I have stitches?

You will have stitches in the vagina which will dissolve on their own in 6-8 weeks and do not need to be removed. You will not be able to see these stitches unless you have a few stitches on the vulval skin on the outside.

What will happen before the operation?

You will see your surgeon to discuss any further questions. You should have had your consent appointment a week or two before your procedure; otherwise this is the time a written consent will be obtained from you.

You will see an Anaesthetist who will assess and explain the type of anaesthetic that is best suited for you. Post-operative pain relief will also be discussed with you.

Pre assessment appointment: A Nurse will assess you and explain the preparation required for your operation a few days before your hysterectomy and arrange blood tests, swabs and any other tests that you may require.

After the operation

You will spend some time in the recovery bay before being moved back to the ward. A catheter will be left in place to enable urine to drain freely. It will be removed usually after a day. You may have a vaginal gauze pack to stop any vaginal bleeding, especially after a vaginal repair. This will be removed within the next 24 hours.

You will be discharged home, dependent on how you feel in 24-72 hours.

What else can I expect after my operation?

Nausea – You may feel slightly nauseated or groggy just as you are coming out of your anaesthetic. This will pass soon and if needed, medication will be given to you to make you feel better. You will be able to resume normal activities soon.

Vaginal bleeding – Some amount of vaginal bleeding and discharge is to be expected, usually for 6-8 weeks or so. If this is heavy, or has an offensive smell or causes you concern, seek medical advice. Avoid tampons to reduce risk of infection.

Other issues

Bathing: You can have a shower or a bath when you feel able. Dry the stitches carefully. Do not use talcum powder in this area. Take off the dressings and leave to air. There is no need to cover the scars.

Work: You should be able to return to work after approximately 6-8 weeks – taking into consideration the type of work you do. However, if you have had keyhole surgery, you will be advised by your doctor how long you need to be off work as it could be shorter.

Lifting – Mobilise as normal, but do not do any heavy lifting for 6-8 weeks.

Sex – You will be able to resume sexual intercourse usually after your postoperative follow up appointment with your surgeon, usually 6-8 weeks. If you are bleeding, wait for this to stop. If you are not bleeding, go ahead when you feel comfortable after you have been given the all clear.

Other physical activities – You will be able to resume other activities such as sport and swimming as soon as you feel able, usually in 6-8 weeks.

Driving: Usually 4 weeks post-surgery, once you can do the emergency stop safely. Do check with your car insurance for their regulations as well.

Travelling abroad: Avoid until after your post-operative medical check.

What can I do when I get home?

Take regular steady exercise.

Eat a well-balanced diet, including plenty of fruit, vegetables, and beans and grains i.e. a naturally occurring low fat high fibre diet. Avoid constipation. *See nutrition leaflet.*

Bath or shower daily. Do not worry about the wounds getting wet, you can wash but remember to leave the area dry afterwards to avoid infection. Leave any wounds exposed as much as possible, again to avoid the area from getting infected.

Wear loose clothing.

Light housework e.g. dusting after the first couple of weeks

Continue your abdominal and pelvic floor exercises as soon as you feel able to do your exercises.

You must wear your stockings properly (the nurses will advise you) while you are in hospital and for at least 4-6 weeks after, until you have recovered from your operation and are fully mobile.

If you have any further questions, please do not hesitate to discuss this either before or after your operation. However, nursing staff will contact you should you wish, the day following your discharge to see how you are. You will also be given a ward contact phone number to use, should you have any problems.

When will I know the results of my surgery?

Following your surgery, the findings and their implications will be discussed with you. Plans will be made for any further treatment and any necessary appointments will usually be made before you leave the hospital. The results of any biopsy or tissue being analysed takes a couple of weeks to come back. You will be seen in clinic for a follow up. If you need further surgery or other treatment, this will be discussed in detail with you, usually in the clinic.

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Your GP will be sent a letter with the findings from your procedure, and any results. You will be copied into this.

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