PATIENT EDUCATION

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Special Procedures • EP183

Surgery for Pelvic Organ Prolapse

*About half of women who have given birth develop some degree of **pelvic organ prolapse (POP)**. POP also can occur in women who have never had children. This problem is caused by the weakening of the muscles and tissues that support the organs in the pelvis. When these muscles weaken, organs such as the **vagina** or **uterus** can prolapse (drop down).*

With proper treatment, symptoms can be reduced or eliminated. Nonsurgical treatment options usually are tried first. If these options do not work and if your symptoms are severe, you may want to consider surgery.

This pamphlet explains

- *causes, types, and symptoms of POP*
- *when to consider surgery*
- *surgical treatment options*

Causes of Pelvic Organ Prolapse

The pelvic organs include the vagina, uterus, ***bladder***, ***urethra***, and ***rectum***. These organs are held in place by muscles of the ***pelvic floor***. Layers of connective tissue also give support.

POP occurs when tissue and muscles can no longer support the pelvic organs. Muscles may become torn or stretched. The main cause of this is pregnancy and vaginal childbirth. Other causes of POP include ***menopause***, aging, and repeated heavy lifting. Conditions that create pressure on the abdomen can cause POP, including the following:

- Being overweight or obese
- Being constipated and straining to have a bowel movement
- Chronic coughing caused by smoking, asthma, or other medical conditions

Types of Pelvic Organ Prolapse

There are several types of prolapse that have different names depending on the part of the body that has dropped.

Cystocele. A cystocele occurs when the tissue between the bladder and the vagina weakens and stretches. This allows the bladder to drop from its normal place into the vagina.

Enterocele. An enterocele is a type of support problem that forms when the small intestine bulges into the vagina. Enteroceles often occur with ***vaginal vault*** prolapse.

Rectocele. A rectocele occurs when the tissue between the rectum and the vagina weakens and stretches. This allows the rectum to bulge into the vagina.

Uterine Prolapse. When the uterus drops into the vagina, it is called uterine prolapse. The distance the uterus drops may vary. Mild degrees of prolapse are common. Mild uterine prolapse often does not cause symptoms and usually does not need surgery.

Vaginal Vault Prolapse. When the top of the vagna loses its support and drops, it is called vaginal vault prolapse. This problem occurs most often in women who have had their uterus removed (***hysterectomy***). The degree of prolapse varies.

Symptoms of Pelvic Organ Prolapse

Symptoms of POP can come on gradually and may not be noticed at first. A health care professional may discover a prolapse during a physical exam. Women with symptoms may experience the following:

- Feeling of pelvic pressure or fullness
- Bulge in the vagina
- Organs bulging out of the vagina
- Leakage of urine ***(urinary incontinence)***
- Difficulty completely emptying the bladder
- Problems having a bowel movement
- Lower back pain
- Problems with inserting tampons or applicators

Nonsurgical Treatments

If you have symptoms, nonsurgical treatment options usually are tried first. Often the first nonsurgical option tried is a ***pessary***. This device is inserted into the vagina to support the pelvic organs. There are many types of pessaries available. Your health care professional can help find the right pessary that fits comfortably.

Changes in diet and lifestyle may be helpful in relieving some symptoms. If urinary incontinence is a problem, limiting excessive fluid intake and altering the types of fluid consumed may be helpful. This may include decreasing alcohol and drinks that have caffeine. Bladder training (in which you empty your bladder at scheduled times) also may be useful for women with incontinence.

Women with bowel problems may find that increasing the amount of fiber in their diets prevents constipation and straining during bowel movements. Sometimes a medication that softens stools is prescribed. If a woman is overweight or obese, weight loss can help improve her overall health and possibly her prolapse symptoms. For some women, special exercises also may be helpful (see box "***Kegel Exercises***").

Deciding to Have Surgery

If your symptoms are severe and disrupt your life, and if nonsurgical treatment options have not helped, you may want to consider surgery. A major factor in this decision is the severity of your symptoms. The following factors also should be considered when deciding whether to have surgery:

- Your age—If you have surgery at a young age, there is a chance that prolapse will come back and may require more treatment. If you have surgery at an older age, your overall health and history of surgeries may impact what type of surgery you have.
- Your childbearing plans—Ideally, women who plan to have children (or more children) should postpone surgery until their families are complete to avoid the risk of prolapse happening again after corrective surgery.
- Health conditions—Surgery may carry risks if you have a medical condition, such as ***diabetes mellitus***, heart disease, or breathing problems, or if you smoke or are obese.

There is no guarantee that any treatment—including surgery—will relieve all of your symptoms. Also, new problems may occur after surgery, such as pain

Kegel Exercises

Kegel exercises tone the pelvic muscles. They strengthen the muscles that surround the openings of the urethra, vagina, and rectum. Here is how they are done:

- Squeeze the muscles that you use to stop the flow of urine. This contraction pulls the vagina and rectum up and back.
- Hold for 3 seconds, then relax for 3 seconds.
- Do 10 contractions three times a day.
- Increase your hold by 1 second each week. Work your way up to 10-second holds.

Make sure you are not squeezing your stomach, thigh, or buttock muscles. You also should breathe normally. Do not hold your breath as you do these exercises. Also, do not do these exercises when you are urinating.

during ***sexual intercourse***, pelvic pain, or urinary incontinence.

Surgery for Pelvic Organ Prolapse

In general, there are two types of surgery: 1) ***obliterative surgery*** and 2) ***reconstructive surgery***. Obliterative surgery narrows or closes off the vagina to provide support for prolapsed organs. Sexual intercourse is not possible after this procedure. Obliterative surgery has a high success rate and may be a good choice for women who do not plan to have sex in the future and who want an easily performed procedure.

Most women who have surgery to treat POP have reconstructive surgery. The goal of reconstructive surgery is to restore organs to their original position. Some types of reconstructive surgery are done through an incision in the vagina. Others are done through an incision in the abdomen or with ***laparoscopy***. A surgical robot may be used to assist with laparoscopy.

Surgical mesh is used in some types of reconstructive surgery to reinforce or support prolapsed organs. Mesh can be made of animal material or from synthetic materials. There are risks and benefits to using mesh in POP surgery. It is important to understand the risks and benefits when deciding what type of reconstructive surgery to have (see "Surgery Using Vaginally Placed Mesh").

Types of Reconstructive Surgery

There are many types of reconstructive surgical procedures. Often, more than one type of surgery is done at the same time to fix multiple problems. Lifestyle issues, such as your weight, whether you smoke, or whether you have a physically demanding job that requires heavy lifting, often play a role in the type of procedure you will have.

Fixation or Suspension Using Your Own Tissues

This type of surgery often is referred to as "native tissue repair" because it uses your own tissues to fix uterine or vaginal vault prolapse. It is performed through an incision in the vagina. The prolapsed part is attached with stitches to a ***ligament*** or to a muscle in the pelvis.

Because it is performed through the vagina, this type of surgery takes less time to perform than types of surgery performed through an incision in the abdomen. The recovery time usually is shorter.

Complications include injury to the ***ureters***, bowel, or bladder; pain during sex; and urinary incontinence. A procedure to prevent urinary incontinence may be done at the same time. Buttock pain may occur for the first few weeks in about 1 in 10 women. Heavy bleeding is rare but can be life-threatening.

Colporrhaphy

Colporrhaphy is used to treat prolapse of the anterior (front) wall of the vagina and prolapse of the posterior (back) wall of the vagina. This type of surgery is performed through the vagina.

In anterior colporrhaphy, stiches are used to strengthen the front wall of the vagina so that it once again supports the bladder. In posterior colporrhaphy, stiches are used to strengthen the back wall of the vagina so that it once again supports the rectum. Complications include pain during sex and injury to the bladder, ureters, or rectum.

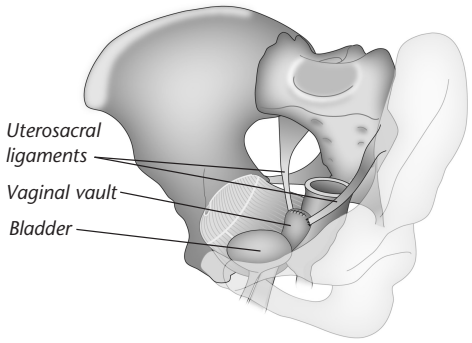
Sacrocolpopexy

Sacrocolpopexy is used to treat vaginal vault prolapse and enterocele. It can be done with an abdominal incision or with laparoscopy with or without robotic assistance. Surgical mesh is attached to the front and back walls of the vagina. A special kind of mesh shaped like a Y can be used. The ends of the mesh then are attached to the sacrum (tail bone). This lifts the vagina back into place.

A similar procedure, also performed with an abdominal incision, is called ***sacrohysteropexy***. This procedure is used to treat uterine prolapse when a woman does not want a hysterectomy. Surgical mesh is attached to the ***cervix*** and then to the sacrum, lifting the uterus back into place.

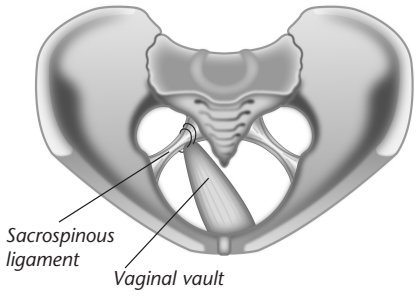
A benefit with this type of surgery is that women may have less pain during sex than after procedures performed through the vagina. But with an abdominal incision, there is a risk of damage to the intestines and a risk of complications from ***adhesions***. There also is a

Uterosacral Ligament Suspension



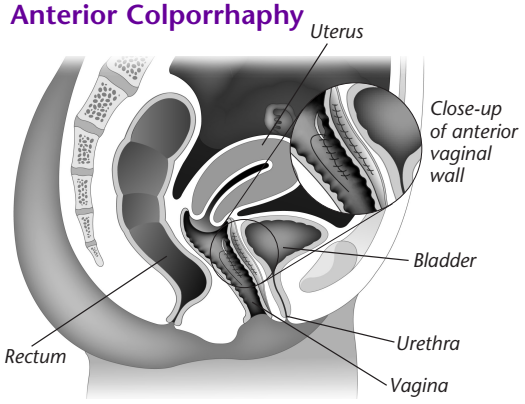
The prolapsed vaginal vault is attached to the uterosacral ligaments.

Sacrospinous Fixation



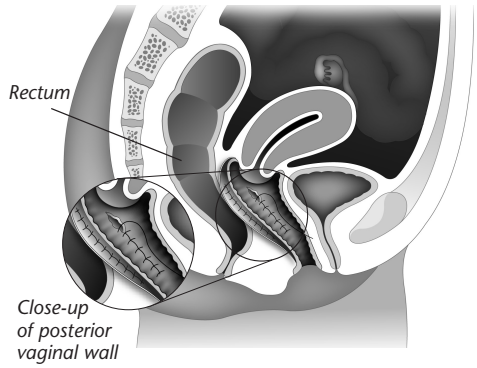
The prolapsed vaginal vault is attached to the sacrospinous ligament on one side (shown) *or both sides* (not shown).

Anterior Colporrhaphy



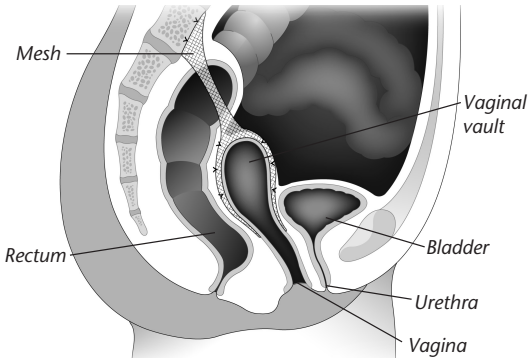
The anterior wall of the vagina is strengthened with stitches so that it once again supports the bladder.

Posterior Colporrhaphy



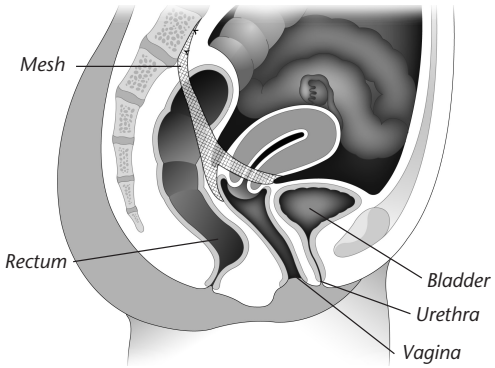
The posterior wall of the vagina is strengthened with stitches so that it once again supports the rectum.

Sacrocolpopexy



Through an abdominal incision, surgical mesh is attached to the vaginal vault and secured to the sacrum.

Sacrohysteropexy



Surgical mesh is attached to the cervix and secured to the sacrum.

small risk that the mesh will erode (wear through the tissues) into the vagina. Mesh erosion can cause scarring and pain that can be long-lasting. Additional surgery may be needed to remove the mesh. Other complications include pelvic pain, pain during sex, and damage to the bladder, bowel, ureters, or blood vessels.

Surgery Using Vaginally Placed Mesh

Some procedures use surgical mesh placed through a vaginal incision to help lift prolapsed organs into place or to reinforce repairs made to the vaginal walls. Mesh can be used to treat all types of prolapse, but it is most often used to treat bladder prolapse.

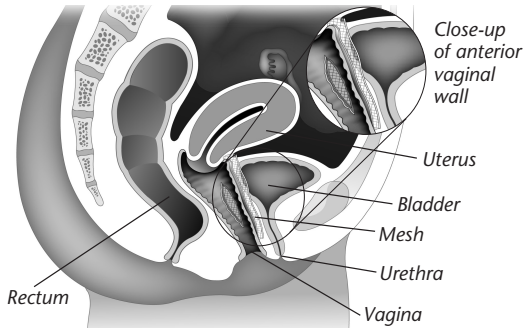
A benefit of vaginal mesh surgery is that it can be used to repair prolapse in women whose own tissues are not strong enough for native tissue repair. For women in which this is not the case, there is debate about whether vaginally placed mesh gives better results than other types of surgery for bladder prolapse. There is not enough information about vaginally placed mesh for vaginal vault prolapse, uterine prolapse, or rectocele to say whether these procedures are better for relieving symptoms of prolapse than procedures that do not use mesh.

Vaginally placed mesh has a significant risk of severe complications. These complications include erosion of the mesh into the vagina, bladder, or bowel; pain that interferes with daily life; infection; pain during sex; and bladder or bowel injury. Some of these complications may require more surgery. Although the mesh often can be removed, it may take more than one surgery to do so. Complete removal of mesh may not be possible. If this happens, pain and other complications may never go away completely.

Because of the high risk of complications, procedures using mesh should be reserved for women in whom the benefits may justify the risks. This may include women with anterior prolapse that has come back after a previous surgery. It also may include women who have a medical condition that prevents them from having a longer operation done through an incision in the abdomen.

When considering surgery for POP, it is important to weigh your options. Talk with your health care professional about which option is best for your situation. POP can be treated successfully without mesh in many cases. If you are considering a surgical procedure using vaginally placed mesh, ask your health care

Surgery Using Vaginally Placed Mesh



Surgical mesh is placed through an incision in the vagina to help lift prolapsed organs into place or to reinforce repairs made to the vaginal walls.

professional for detailed information about its risks, benefits, and potential complications (see box "Questions to Ask About Vaginally Placed Mesh").

Questions to Ask About Vaginally Placed Mesh

When considering mesh surgery for POP, it is important to balance the risks and benefits of the surgery. Questions to ask your health care professional about the use of mesh in POP surgery include the following:

- What are the pros and cons of using surgical mesh in my particular case?
- Can my repair be successfully performed without using mesh?
- What has been your experience with implanting this particular mesh product?
- What experience have your other patients had with this product?
- What has been your experience in dealing with the complications that might occur?
- What can I expect to feel after surgery and for how long?
- Are there any specific side effects I should let you know about after the surgery?
- What if the mesh does not correct my problem?
- If I have a complication related to the mesh, can it be removed? What could the consequences be?
- Is there patient information that comes with the mesh product? Can I have a copy?

Resource: Information for Patients for POP. U.S. Food and Drug Administration. January 2016.

After Surgery

Recovery time varies depending on the type of surgery. You usually need to take a few weeks off from work. For the first few weeks, you should avoid vigorous exercise, lifting, and straining. You also should avoid sex for several weeks after surgery.

It is not known whether anything can be done to keep prolapse from coming back after surgery. Avoiding activities that increase pressure inside the abdomen may be helpful, such as controlling your weight, avoiding constipation, and not lifting heavy objects. If you have new symptoms, let your health care professional know.

Finally…

If you have POP symptoms, and they interfere with your normal activities, you may need treatment. Nonsurgical treatment options are available that work for many women. If nonsurgical treatments do not work and you feel that your quality of life is not what it should be, you may want to consider surgery. It is important to understand the risks, benefits, and possible complications of surgery.

Glossary

Adhesions: Scars that can make tissue surfaces stick together.

Bladder: A hollow, muscular organ in which urine is stored.

Cervix: The lower, narrow end of the uterus at the top of the vagina.

Colporrhaphy: Surgery done through the vagina to repair a bulge using a woman's own tissue.

Diabetes Mellitus: A condition in which the levels of sugar in the blood are too high.

Hysterectomy: Surgery to remove the uterus.

Kegel Exercises: Pelvic muscle exercises. Doing these exercises helps with bladder and bowel control as well as sexual function.

Laparoscopy: A surgical procedure in which a thin, lighted telescope called a laparoscope is inserted through a small incision (cut) in the abdomen. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

Ligament: A band of tissue that connects bones or supports large internal organs.

Menopause: The time when a woman's menstrual periods stop permanently. Menopause is confirmed after 1 year of no periods.

Obliterative Surgery: A type of surgery in which the vagina is narrowed or closed off to support organs that have dropped down.

Pelvic Floor: A muscular area that supports a woman's pelvic organs.

Pelvic Organ Prolapse (POP): A condition in which a pelvic organ drops down. This condition is caused by weakening of the muscles and tissues that support the organs in the pelvis, including the vagina, uterus, and bladder.

Pessary: A device that can be inserted into the vagina to support the organs that have dropped down or to help control urine leakage.

Reconstructive Surgery: Surgery to repair or restore a part of the body that is injured or damaged.

Rectum: The last part of the digestive tract.

Sacrocolpopexy: A type of surgery to repair vaginal vault prolapse. The surgery attaches the vaginal vault to the sacrum with surgical mesh.

Sacrohysteropexy: A type of surgery to repair uterine prolapse. The surgery attaches the cervix to the sacrum with surgical mesh.

Sexual Intercourse: The act of the penis of the male entering the vagina of the female. Also called "having sex" or "making love."

Ureters: A pair of tubes, each leading from one of the kidneys to the bladder.

Urethra: A tube-like structure. Urine flows through this tube when it leaves the body.

Urinary Incontinence: Uncontrolled loss of urine.

Uterus: A muscular organ in the female pelvis. During pregnancy this organ holds and nourishes the fetus.

Vagina: A tube-like structure surrounded by muscles. The vagina leads from the uterus to the outside of the body.

Vaginal Vault: The top of the vagina after hysterectomy (removal of the uterus).

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American College of Obstetricians and Gynecologists
409 12th Street, SW
PO Box 96920
Washington, DC 20090-6920