

DA VINCI ROBOTIC PELVIC PROLAPSE CORRECTION

The uterus is held in position by pelvic muscles, ligaments and other tissues. If the uterus drops out of its normal position, this is called prolapse. Prolapse is defined as a body part falling or slipping out of position. Prolapse happens when the pelvic muscles and connective tissues weaken. The uterus can slip to the extent that it drops partially into the vagina and creates a noticeable lump or bulge. This is called incomplete prolapse. Complete prolapse occurs when the uterus slips to such a degree that some uterine tissue is outside the vagina.

Pelvic prolapse is usually accompanied by some degree of *vaginal vault prolapse*. Vaginal vault prolapse occurs when the upper part of the vagina loses its shape and sags into the vaginal canal or outside the vagina. Pelvic prolapse may also involve sagging or slipping of other pelvic organs, including the bladder, the urethra which is the tube next to the vagina that allows urine to leave your body, and rectum.

Anatomy of the Vagina

The vaginal vault is the “ceiling” or the inner, upper end of the vagina. The vaginal vault has four “compartments”: an anterior compartment, closest to the front of the body; the vaginal wall; a middle compartment consisting of the cervix; and a posterior compartment consisting of the vaginal wall at the back of the body.

Signs & Symptoms¹

Women with mild cases of pelvic prolapse may have no noticeable symptoms. However, as the uterus falls further out of position, it can place pressure on other pelvic organs—such as the bladder or bowel — causing a variety of symptoms, including:

- Sensation of sitting on a small ball
- Heaviness or pulling in the pelvis
- Pelvic or abdominal pain
- Pain during intercourse
- Protrusion of tissue from the opening of the vagina
- Repeated bladder infections

- Vaginal bleeding or an unusual or excessive discharge
- Constipation
- Frequent urination or an urgent need to empty your bladder

Symptoms may worsen with prolonged standing or walking due to added pressure placed on the pelvic muscles by gravity.

Causes and Risk Factors¹

Pelvic prolapse is fairly common and the risk of developing the condition increases with age. It can occur in women who have had one or more vaginal births. Normal aging and lack of estrogen after menopause may also cause pelvic prolapse. Chronic coughing, heavy lifting and obesity increase the pressure on the pelvic floor and may contribute to the condition. Although rare, pelvic prolapse can also be caused by a pelvic tumor. Chronic constipation and the pushing associated with it can worsen pelvic prolapse.

Screening & Diagnosis¹

Diagnosing pelvic prolapse requires a pelvic examination usually performed by a gynecologist. The doctor will ask about your medical history and perform a complete pelvic examination to check for signs of pelvic prolapse. You may be examined while lying down and standing. Imaging tests, such as ultrasound or magnetic resonance imaging (MRI), may be performed to further evaluate the pelvic prolapse.

Treatment¹

Treatment is not necessary unless the symptoms are bothersome. Most women seek treatment by the time the uterus drops to the opening of the vagina. Losing weight, stopping smoking and getting proper treatment for contributing medical problems, such as lung disease, may slow the progression of pelvic prolapse.

If you have very mild pelvic prolapse – without any symptoms – or very mild symptoms, treatment is usually unnecessary. However, keep in mind that without treatment, you may continue to lose uterine support, which could cause more severe symptoms.

While clinical studies support the effectiveness of the *da Vinci* Surgical System when used in minimally invasive surgery, individual results may vary. There are no guarantees of outcome. All surgeries involve the risk of major complications. Before you decide on surgery, discuss treatment options with your doctor. Understanding the risks of each treatment can help you make the best decision for your individual

situation. Surgery with the *da Vinci* Surgical System may not be appropriate for every individual; it may not be applicable to your condition. Always ask your doctor about all treatment options, as well as their risks and benefits. Only your doctor can determine whether *da Vinci* Surgery is appropriate for your situation. The *clinical information and opinions, including any inaccuracies expressed in this material* by patients or doctors *about da Vinci Surgery*, are not necessarily those of Intuitive Surgical, Inc. and should not be considered as substitute for medical advice provided by your doctor. © 2010 Intuitive Surgical. All rights reserved.

1. Uterine Prolapse; A service of the U.S. National Library of Medicine – National Institutes of Health. Available from:<http://nlm.nih.gov/medlineplus/ency/article/001508>

Non Surgical Prolapse Options

There are a number of non surgical options that are available for you to discuss with your physician.

Kegel Exercises

Special exercises, called Kegel exercises, can help strengthen the pelvic floor muscles. This may be the only treatment needed in mild cases of uterine prolapse. To do Kegel exercises, tighten your pelvic muscles as if you are trying to hold back urine. Hold the muscles tight for a few seconds and then release. Repeat. You may do these exercises anywhere and at any time. To see results, it is recommended that you repeat the exercise four times daily. kegelexercises.com.

Vaginal Pessary

A pessary is a rubber or plastic doughnut-shaped device that fits around or under the lower part of the uterus (cervix), helping to prop up the uterus and hold it in place. A health care provider will fit and insert the pessary, which must be cleaned frequently and removed before sex.

Estrogen Replacement Therapy

ERT refers to a woman taking supplements of hormones such as estrogen alone or estrogen with another hormone called progesterone (progestin in its synthetic form).

ERT replaces hormones that a woman's body should be making or used to make.¹ Taking estrogen may help to limit further weakness of the muscles and other connective tissues that support the uterus. However, there are some drawbacks to taking estrogen, such as an increased risk of blood clots, gallbladder disease and breast cancer. The decision to use ERT must be made with your doctor after carefully weighing all of the risks and benefits.

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1. "Estrogen Replacement Therapy (ERT)," National Institute of Child Health & Human Development. nichd.nih.gov.

Source: nichd.nih.gov/health/topics/estrogen_replacement_therapy

Source: davincihysterectomy.com/benign_conditions/prolapse/non_surgical_options

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da Vinci® Surgical Options

da Vinci® Surgery for Uterine or Vaginal Vault Prolapse (Sacrocolpopexy)

For many women, surgery may be the best treatment option to repair pelvic prolapse, including vaginal vault prolapse. Your doctor will perform a physical exam to determine the best way to completely repair the prolapse. Pelvic prolapse surgery is known as

sacrocolpopexy. Surgical mesh is used to hold the affected pelvic organ(s) in the correct anatomical position. This procedure can also be performed after a hysterectomy to treat uterine prolapse. It provides long-term support of the vagina.¹

Prolapse surgery has traditionally been performed as open surgery. A long horizontal incision is made in the lower abdomen to access the pelvic organs, but recovery after open surgery is often lengthy. Prolapse surgery can also be performed minimally invasively – through small incisions – with laparoscopic surgery. Traditional laparoscopy may present challenges due to the long-handled, rigid instruments needed for the procedure. Fortunately, there is a minimally invasive option that overcomes the limits of traditional open and laparoscopic surgery – da Vinci Surgery.

da Vinci® Surgery

If your doctor recommends surgery to treat pelvic prolapse, you may be a candidate for da Vinci Sacrocolpopexy. Using state-of-the-art technology, da Vinci Surgery requires only a few tiny incisions, so you can get back to your life faster. The da Vinci System enables your doctor to operate with enhanced vision, precision, dexterity and control. da Vinci's 3D, high-definition vision system allows surgeons to see key anatomy with immense depth and clarity– critical for complex conditions.

da Vinci Sacrocolpopexy offers several potential benefits over traditional open surgery, including:

- Less blood loss
- Minimal need for blood transfusions
- Shorter hospital stay

Potential benefits of da Vinci Surgery compared to traditional laparoscopy include:

- Less blood loss
- Much shorter operation
- Small incisions for minimal scarring

The da Vinci System is a state-of-the-art robotic surgical platform with 3D, high-definition vision and miniaturized, wristed instruments designed to help doctors take surgery beyond the limits of the human hand. Your doctor controls the da Vinci System which translates his/her hand movements into more precise movements of miniaturized instruments inside your body.

By helping doctors to overcome the challenges of traditional open and laparoscopic surgery, da Vinci is changing the experience of surgery for women around the world.

If you have been putting off treatment for pelvic prolapse, it's time to ask your doctor about da Vinci Surgery.

- The da Vinci Surgical System
- FAQs
- Am I A Candidate?
- Important Safety Information

Learn why da Vinci Surgery may be your best treatment option.

As with any surgery, these benefits cannot be guaranteed since surgery is specific to each patient, condition and procedure. It is important to talk to your doctor about all treatment options, including the risks and benefits. This information can help you to make the best decision for your situation.

While clinical studies support the effectiveness of the da Vinci Surgical System when used in minimally invasive surgery, individual results may vary. There are no guarantees of outcome. All surgeries involve the risk of major complications. Before you decide on surgery, discuss treatment options with your doctor. Understanding the risks of each treatment can help you make the best decision for your individual situation. Surgery with the da Vinci Surgical System may not be appropriate for every individual; it may not be applicable to your condition. Always ask your doctor about all treatment options, as well as their risks and benefits. Only your doctor can determine whether da Vinci Surgery is appropriate for your situation. The clinical information and opinions, including any inaccuracies expressed in this material by patients or doctor about da Vinci Surgery are not necessarily those of Intuitive Surgical, Inc. and should not be considered as substitute for medical advice provided by your doctor. All persons depicted are models unless otherwise noted. © 2011 Intuitive Surgical. All rights reserved. Intuitive, Intuitive Surgical, da Vinci, da Vinci S, da Vinci Si, Single-Site, InSite, TilePro and EndoWrist are trademarks or registered trademarks of Intuitive Surgical. All other product names are trademarks or registered trademarks of their respective holders.

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2. Geller EJ, Siddiqui NY, Wu JM, Visco AG. Short-Term Outcomes of Robotic Sacrocolpopexy Compared With Abdominal Sacrocolpopexy. *Obstetrics & Gynecology*. 2008;112:1201-6.
3. Seror J, Yates DR, Seringe E, Vaessen C, Bitker MO, Chartier-Kastler E, Rouprêt M. Prospective comparison of short-term functional outcomes obtained after pure laparoscopic and robot-assisted laparoscopic sacrocolpopexy. *World J Urol*. 2011 Aug 20. [Epub ahead of print]

Source: http://davincihysterectomy.com/benign_conditions/prolapse/surgical_options