

Facing Benign Colorectal Surgery?

Learn about minimally invasive
da Vinci® Surgery



da Vinci® Surgery

The Surgery:

Colorectal Surgery

The colon and rectum are part of your large intestine. Their main purpose is to process and pass waste from your body. Common benign (non cancerous) conditions that may affect your colon and cause symptoms include: diverticulitis, ulcerative colitis, Crohn's disease and rectal prolapse. If medicine and lifestyle changes do not ease your symptoms, your doctor may suggest surgery, such as:

Colectomy/Colon Resection: Surgery to remove the diseased part of your colon and connect the healthy bowel that remains.

Right Colectomy: Surgery on the right side of your colon (large intestine).

Left Colectomy: Surgery on your left colon.

Sigmoid Colectomy: Surgery on the sigmoid colon (lower left part of your colon before your rectum).

Total Colectomy: Surgery to remove the entire colon.

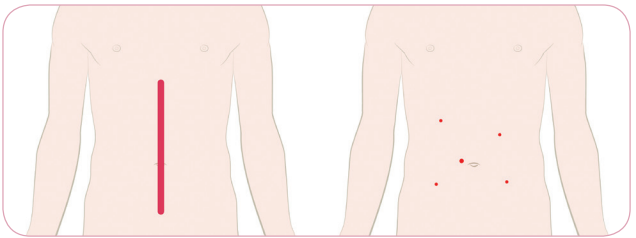
Rectopexy: Surgery to restore the rectum to its normal position.



Open Surgery: Colorectal surgery may be done using open surgery. A large incision (cut) is made in the abdomen to allow the surgeon's hands and instruments to reach your organs.

Minimally Invasive Surgery: Colorectal surgery can also be done using minimally invasive surgery with traditional laparoscopy. This means your surgeon operates through a few small incisions in the abdomen using long, thin instruments and a tiny camera. The camera sends images to a monitor in the operating room to guide your surgeon during the operation.

There is another minimally invasive surgery option: robotic-assisted **da Vinci Surgery**.



Open Surgery
Incision

da Vinci Surgery/
Laparoscopy Incisions



da Vinci Surgery:

A Minimally Invasive Surgical Option

Using the *da Vinci* Surgical System, surgeons operate through a few small incisions. The *da Vinci* System has a 3D HD vision system that gives doctors a magnified view inside the body. It also has tiny instruments that bend and rotate far greater than the human hand. These features enable surgeons to operate with enhanced vision, precision and control.

da Vinci Colectomy offers the following potential benefits compared to traditional laparoscopy:

- › Lower blood loss^{1,2}
- › Quicker return of bowel function^{1,3}
- › Lower rate of complications^{1,4,5}
- › Shorter hospital stay^{1,4}
- › Small incisions for minimal scarring

The *da Vinci* System has brought minimally invasive surgery to more than 3 million patients worldwide. *da Vinci* technology – changing the experience of surgery for people around the world.

Risks and Considerations Related to Bowel Resection and Other Colorectal Procedures

(removal of all/part of the intestine): leaking and/or narrowing at the spot where two sections of bowel were reconnected, colorectal or anal dysfunction (cannot empty bowel, frequent bowel movements, leakage or constipation).

Important Information for Patients:

Serious complications may occur in any surgery, including *da Vinci*® Surgery, up to and including death. Risks include, but are not limited to, injury to tissues and organs and conversion to other surgical techniques. If your doctor needs to convert the surgery to another surgical technique, this could result in a longer operative time, additional time under anesthesia, additional or larger incisions and/or increased complications. Individual surgical results may vary. Patients who are not candidates for non-robotic minimally invasive surgery are also not candidates for *da Vinci* Surgery. Patients should talk to their doctor to decide if *da Vinci* Surgery is right for them. Patients and doctors should review all available information on non-surgical and surgical options in order to make an informed decision. Please also refer to www.daVinciSurgery.com/Safety for Important Safety Information.

Your doctor is one of a growing number of surgeons worldwide offering *da Vinci*® Surgery.

For more information and to find a *da Vinci* Surgeon nearest you, visit:
www.daVinciSurgery.com

¹ Chang Y, Wang J, Chang D. A meta-analysis of robotic versus laparoscopic colectomy. *Journal of Surgical Research*. 2015;195(2):465-474. doi:10.1016/j.jss.2015.01.026. ² Rondelli F, Balzarotti R, Villa F et al. Is robot-assisted laparoscopic right colectomy more effective than the conventional laparoscopic procedure? A meta-analysis of short-term outcomes. *International Journal of Surgery*. 2015;18:75-82. doi:10.1016/j.ijsu.2015.04.044. ³ Zarak A, Castillo A, Kichler K, de la Cruz L, Tamariz L, Kaza S. Robotic versus laparoscopic surgery for colonic disease: a meta-analysis of postoperative variables. *Surgical Endoscopy*. 2015;29(6):1341-1347. doi:10.1007/s00464-015-4197-7. ⁴ Altieri M, Yang J, Telem D et al. Robotic approaches may offer benefit in colorectal procedures, more controversial in other areas: a review of 168,248 cases. *Surgical Endoscopy*. 2015;30(3):925-933. doi:10.1007/s00464-015-4327-2. ⁵ Lorenzon L, Bini F, Balducci G, Ferri M, Salvi P, Marinozzi F. Laparoscopic versus robotic-assisted colectomy and rectal resection: a systematic review and meta-analysis. *International Journal of Colorectal Disease*. 2015;31(2):161-173. doi:10.1007/s00384-015-2394-4.