

# Facing Benign Colorectal Surgery?

Learn about minimally invasive  
*da Vinci*® Surgery



*da Vinci*.Surgery

## The Conditions:

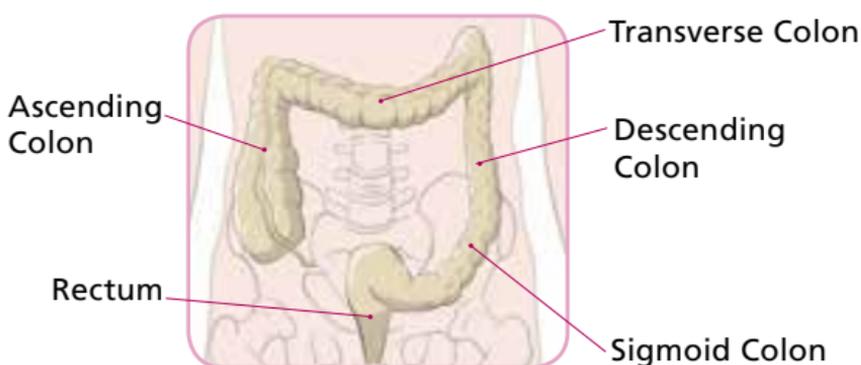
### Diverticulitis, Ulcerative Colitis, Crohn's Disease, Rectal Prolapse

The colon and rectum are part of your large intestine. The main purpose of these organs is to process and pass waste from your body. There are several conditions that can affect your colon, such as: diverticulitis, ulcerative colitis, Crohn's disease and rectal prolapse.

Diverticulitis is a condition in which a small pouch forms and inflames inside your colon. The most common symptom is abdominal pain. While diverticulitis has been linked to a low fiber diet, the exact cause is unknown. About 10% of people over the age of 40 have diverticulitis in the U.S. alone.<sup>1</sup>

Ulcerative colitis and Crohn's disease are jointly known as inflammatory bowel disease (IBD). IBD causes the digestive tract to inflame. Symptoms may include: diarrhea, rectal bleeding, fever and weight loss. Five million people worldwide have IBD, but the exact cause is unknown.<sup>2</sup>

Rectal prolapse occurs when tissue lining the rectum falls into the anus. The condition is more common in the elderly, and is often linked to constipation.



The Intestinal Tract

# The Surgery: Colorectal Surgery

Treatment options often depend on how severe your symptoms are, how many episodes you have experienced, your age and overall health. If medicine and lifestyle changes do not ease your symptoms, your doctor may recommend surgery.

There are several types of operations that can be performed on your colon. When doctors remove the affected part of your colon and join together the remaining healthy bowel, this is known as a colectomy or colon resection. Surgery on your right colon is called a right colectomy; surgery on your left colon is a left colectomy; and surgery on the sigmoid colon (lower left part of your colon before your rectum) is called a sigmoid colectomy. When your entire colon is removed, it is called a total colectomy.

Colorectal procedures are often performed with open surgery, which requires a large incision. The incision must be large enough for your surgeon to fit his or her hands and surgical instruments inside your body. Open surgery allows doctors to touch your organs as they operate.



Colorectal procedures can also be performed using minimally invasive surgery (laparoscopy). This means your surgeon operates through a few small incisions in the abdomen using long-handled instruments and a tiny camera. The camera sends images to a video monitor in the operating room to guide your surgeon during the operation.

There is another minimally invasive surgical option for patients facing colorectal surgery: state-of-the-art *da Vinci* Surgery.



Open Surgery  
Incision

*da Vinci* Surgery/  
Laparoscopy Incisions



# ***da Vinci* Surgery:**

## **A Minimally Invasive Surgical Option**

If your doctor recommends surgery for diverticulitis, ulcerative colitis, Crohn's disease or rectal prolapse, ask about minimally invasive *da Vinci* Surgery.

Using the *da Vinci* System, your surgeon makes a few small incisions - similar to traditional laparoscopy. The *da Vinci* System features a magnified 3D HD vision system and tiny wristed instruments that bend and rotate far greater than the human wrist. These features enable surgeons to operate with enhanced vision, precision, and control.

As a result of *da Vinci* technology, *da Vinci* Colectomy offers the following potential benefits:

- › Precise removal of cancerous tissue<sup>3</sup>
- › Low blood loss<sup>3,4</sup>
- › Quick return of bowel function<sup>4,5</sup>
- › Quick return to a normal diet<sup>4,5</sup>
- › Low rate of complications<sup>3,4,5</sup>
- › Low rate of converting to open surgery compared to traditional laparoscopy<sup>4,5</sup>
- › Short hospital stay<sup>3,4,5</sup>
- › Small incisions for minimal scarring

### **Risks & Considerations Related to Colectomy & *da Vinci* Surgery:<sup>3</sup>**

Leaking and/or narrowing at the spot where two sections of bowel were reconnected, 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*<sup>®</sup> Surgery, up to and including death.

Examples of serious or life-threatening complications, which may require prolonged and/or unexpected hospitalization and/or reoperation, include but are not limited to, one or more of the following: injury to tissues/organs, bleeding, infection and internal scarring that can cause long-lasting dysfunction/pain. Risks of surgery also include the potential for equipment failure and/or human error. Individual surgical results may vary.

Risks specific to minimally invasive surgery, including *da Vinci* Surgery, include but are not limited to, one or more of the following: temporary pain/nerve injury associated with positioning; temporary pain/discomfort from the use of air or gas in the procedure; a longer operation and time under anesthesia and conversion to another surgical technique. 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.

Patients who are not candidates for non-robotic minimally invasive surgery are also not candidates for *da Vinci*<sup>®</sup> 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. For Important Safety Information, including surgical risks, indications, and considerations and contraindications for use, please also refer to [www.davincisurgery.com/safety](http://www.davincisurgery.com/safety) and [www.intuitivesurgical.com/safety](http://www.intuitivesurgical.com/safety).

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## The Enabling Technology: *da Vinci* Surgical System

The *da Vinci* Surgical System is designed to provide surgeons with enhanced capabilities, including high-definition 3D vision and a magnified view. Your doctor controls the *da Vinci* System, which translates his or her hand movements into smaller, more precise movements of tiny instruments inside your body.



Though it is often called a “robot,” *da Vinci* cannot act on its own. Surgery is performed entirely by your doctor. Together, *da Vinci* technology allows your doctor to perform routine and complex procedures through just a few small openings, similar to traditional laparoscopy.

Over the last decade, the *da Vinci* System has brought minimally invasive surgery to over 2 million patients worldwide. *da Vinci* - changing the experience of surgery for people around the world.

**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 near you, visit:

**[www.daVinciSurgery.com](http://www.daVinciSurgery.com)**

<sup>1</sup> National Digestive Diseases Information Clearinghouse; National Institutes of Health; URL: <http://digestive.niddk.nih.gov/ddiseases/pubs/diverticulosis/>

<sup>2</sup> Crohn's and Colitis Foundation of Canada. Available from: <http://www.cffc.ca/site/c.ajlRK4NLLhJ0E/b.7080069/> <sup>3</sup> Patel CB, et al. A three-arm (laparoscopic, hand-assisted, and robotic) matched-case analysis of intraoperative and postoperative outcomes in minimally invasive colorectal surgery. *Dis Colon Rectum*. 2011 Feb;54(2):144-50. <sup>4</sup> D'Annibale A, et al. Robotic and laparoscopic surgery for treatment of colorectal diseases. *Dis Colon Rectum*. 2004 Dec;47(12):2162-8. <sup>5</sup> Spinoglio G, et al. Robotic colorectal surgery: first 50 cases experience. *Dis Colon Rectum*. 2008 Nov;51(11):1627-32. Epub 2008 May 17.