Facing Gallbladder Surgery?

Learn about minimally invasive da Vinci Single-Site® Surgery
The Conditions:

Gallbladder Diseases/Disorders

Your gallbladder is a pear-shaped organ under your liver that stores and concentrates bile to help digest fat. Gallbladder disease includes: inflammation, infection, or blockage (obstruction) of the gallbladder. The most common blockage is a gallstone. Gallstones are pebble-like and solid. They can be as large as a golf ball or as small as a grain of sand.

Gallbladder disease is very common, affecting about 10-15% of adults in Europe and the U.S.¹ It is more common in women, Native Americans, Hispanics, the obese and people over age 40.²

Symptoms of gallbladder disease may include: pain in the upper right side or middle of the abdomen, abdominal fullness, clay-colored stool, fever, nausea and vomiting, or yellowing of skin and whites of eyes (jaundice).
Treatment for gallbladder disease may include lifestyle changes and medication. If your symptoms get worse, your doctor may recommend surgery to remove your gallbladder. Your gallbladder is an organ that you can live without. Surgery to remove the gallbladder is known as a cholecystectomy.

Cholecystectomy can be performed using open surgery through a large incision or with minimally invasive surgery through small incisions (ports). Minimally invasive surgery is known as laparoscopy or laparoscopic surgery. With traditional laparoscopy and multi-port da Vinci Surgery, doctors operate through a few small incisions using long-handled instruments to reach your gallbladder. One of the instruments has a tiny camera at the end. The camera takes images inside your body and sends them to a video monitor to guide surgeons as they operate.

Your surgeon may also perform laparoscopic surgery through one incision in the navel (belly button) to virtually eliminate scarring.
Another minimally invasive surgical option is *da Vinci Single-Site*® Surgery. With *da Vinci*, your surgeon makes one small incision in your belly button to remove your gallbladder – similar to single incision laparoscopy.

The *da Vinci* System features a magnified 3D high-definition vision system coupled with flexible *Single-Site* instruments. These features enable your doctor to operate with enhanced vision and precision.
**da Vinci® Single-Site® Surgery: A Virtually Scarless Procedure**

With *da Vinci Single-Site* Surgery, doctors remove your gallbladder using state-of-the-art precision instruments. Patients who choose *da Vinci Single-Site* experience virtually scarless results, similar to single incision traditional laparoscopy. With *da Vinci*, surgery is performed through one incision in the belly button, which dramatically limits visible scarring.

As a result of *da Vinci* technology, *da Vinci Single-Site* Cholecystectomy offers the following potential benefits:

- Low rate of major complications
- Low conversion rate to open surgery
- Virtually scarless results
- High patient satisfaction
- Minimal pain

*da Vinci Single-Site* Cholecystectomy offers the following potential benefits, similar to single-incision laparoscopy:

- Low rate of major complications
- Low blood loss
- Low rate of wound infection
- Short hospital stay
- Virtually scarless surgery

**Risks & Considerations Related to Cholecystectomy and da Vinci Single-Site Surgery:**

Potential risks of any cholecystectomy procedure include:

- Injury to bile ducts, liver, pancreas
- Injury to small or large intestine
- Pancreatitis (inflammation of the pancreas)

In addition to the above risks, there are risks related to minimally invasive surgery, including *da Vinci Single-Site* Cholecystectomy, such as urinary retention and hernia (bulging tissue) at the incision site.
Important Information for Patients

da Vinci Surgery with Single-Site® instrumentation is cleared for use in gallbladder removal, and for hysterectomy and ovary removal for benign conditions. Patients who bleed easily, have abnormal blood clotting, are pregnant or morbidly obese are not candidates for minimally invasive surgery, including da Vinci Surgery with Single-Site® Instruments.

All surgery presents risk, including da Vinci Surgery. Results, including cosmetic results, may vary. Serious complications may occur in any surgery, up to and including death. Examples of serious and life-threatening complications, which may require hospitalization, include injury to tissues or organs; bleeding; infection, and internal scarring that can cause long-lasting dysfunction or pain. Temporary pain or nerve injury has been linked to the inverted position often used during abdominal and pelvic surgery. Patients should understand that risks of surgery include potential for human error and potential for equipment failure. Risks specific to minimally invasive surgery may include: a longer operative time; the need to convert the procedure to other surgical techniques; the need for additional or larger incision sites; a longer operation or longer time under anesthesia than your surgeon originally predicts. Converting the procedure to open could mean a longer operative time, long time under anesthesia, and could lead to increased complications. Research suggests that there may be an increased risk of incision-site hernia with single-incision surgery. Patients who bleed easily, have abnormal blood clotting, are pregnant or morbidly obese are typically not candidates for minimally invasive surgery, including da Vinci Surgery. Other surgical approaches are available. Patients should review the risks associated with all surgical approaches. They should talk to their doctors about their surgical experience and to decide if da Vinci is right for them. For more complete information on surgical risks, safety and indications for use, please refer to http://www.davincisurgery.com/safety.

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The Enabling Technology: 

*da Vinci*® Surgical System with *Single-Site*® Technology

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, the *da Vinci* System and *Single-Site*® instruments allow your doctor to perform gallbladder surgery through a single incision, similar to single incision traditional laparoscopy. As a result, you may be able to get back to life without the usual recovery following major surgery.