

# Umbilical Hernia Repair Surgery Patient Information

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## What is an Umbilical Hernia?

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An umbilical hernia is an abnormal protrusion through a weakness in the abdominal wall which is at or near the umbilicus. The protrusion contains a cavity (the hernial sac) which can fill with abdominal contents (fat, intestines or both).

Typically, hernias are more obvious when standing or straining (such as coughing, heavy lifting) forcing fatty tissue or bowel into the sac.

## How Do I Know If I Have an Umbilical Hernia?

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Most hernias are recognizable as a bulge under the skin close to the umbilicus. You may feel pain or discomfort at the hernia with certain activities, such as moving heavy objects, coughing, straining during urination or with bowel movements, and with prolonged standing or sitting. The pain may be sharp or dull and may get worse toward the end of the day. Often, a hernial bulge will disappear when you lie down on your back.

Often, hernias cause no or minimal symptoms aside from a bulge.

Most hernias may be detected by your doctor on a routine physical examination.

It may be normal for a hernia bulge to come and go.

If the bulge is INCARCERATED (painful and cannot be pushed back in) or is STRANGULATED (severe constant pain, with redness and tenderness at the hernia), then these are critical signs. This may also be associated with vomiting if bowel is trapped inside the hernia. These symptoms may be cause for concern and you must proceed to an emergency room for urgent evaluation.

## What Causes an Umbilical Hernia?

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The wall of the abdomen has natural areas of potential weakness. Hernias can develop in these areas due to straining, injury, a prior incision, or a weakness present from birth. Anyone can develop a hernia at any age.

Most hernias in children are congenital.

Heavy lifting, persistent cough, straining with bowel movements or urination, can cause the abdominal wall to weaken, tear, or separate resulting in a bulge of abdominal contents through the weakness.

Prolonged strenuous activity may accelerate the appearance of a hernia. On occasion a hernial bulge appears suddenly due to heavy lifting or a forceful cough or sneeze.

## Do All Umbilical Hernias Need to Be Repaired?

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**Not all hernias need to be repaired.** If a hernia is not causing symptoms or enlarging, it may be safe to continue to observe it. Hernias that are not causing symptoms are unlikely to develop serious complications such as strangulation.

A hernia does not resolve on its own. There are no exercises or physical therapy regimens that can cure a hernia. Surgery is the only way to permanently fix a hernia. Decreasing strenuous activity may help reduce symptoms or slow down enlargement.

Umbilical hernias are generally repaired if they are causing symptoms which affect daily activities, are enlarging or if the surgeon feels the hernia is at high risk of STRANGULATION.

Most hernias will eventually cause symptoms or enlarge, but this can take many years.

If a patient is frail or has serious medical conditions, the surgeon may decide that elective surgery carries a high risk and may prescribe an abdominal binder. This is an external belt which supports the hernia, thereby allowing the patient to continue with daily activities.

## **Intended Benefits of Surgery**

The goal of surgery is to reduce discomfort and prevent the hernia from bulging. It should also prevent the hernia from enlarging over time.

Hernias very rarely “strangulate” (get stuck). In this situation, an emergency operation is required. Elective hernia repair prevents this potential complication.

## **Treatment of Umbilical Hernias**

Your surgeon can repair a hernia by bringing the tissues together and closing the gap. If the hernial defect is large and there is tension on the tissues, mesh may be used to provide further strength. The need for mesh is often assessed at the time of surgery.

Repair is often done through a single incision. The size of the incision varies depending on the size of the hernia itself and the size of the patient’s abdomen.

Under certain conditions, the surgeon may recommend a laparoscopic approach where multiple small incisions are required.

## What Preparation Is Required?

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The surgeon who will repair your hernia will inform you about the risks and benefits of the operation. You will sign a consent form confirming you understand and agree to the planned operation.

**Weight loss** is sometimes required before a surgeon can repair a hernia. Obesity is a major risk factor for failed hernia repair and other surgical complications.

Your surgeon's office will advise you about what to do and avoid before your operation. The exact instructions depend on your surgeon, but here are some common things to do:

- Take a shower the night before or the morning of your operation.
  - Please DO NOT SHAVE your abdomen or groin areas. This can increase the risk of infection. If necessary, this will be done by the surgeon in the operating room once you are under anesthetic.
  - Stop eating and drinking at the time your doctor tells you before the operation. Usually, no food or drink after MIDNIGHT
  - The morning of your operation, you may take certain medications your doctor has allowed. Take them with ONLY A SIP OF WATER.
  - You may be asked to stop taking certain medications before your operation. These include BLOOD THINNERS and oral diabetes medications
  - Smoking will increase the risk of the hernia recurrence (failure of the hernia repair), and the risk for infection. In some cases, your surgeon may require that you QUIT SMOKING at least 4-6 weeks prior to your operation in order to improve your outcomes.
  - You will need someone to drive you home after surgery.
  - If you have SLEEP APNEA, bring your CPAP machine with you to hospital
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## What Complications Can Occur?

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Any operation has potential risks. Hernia repair is very safe, but complications can rarely occur:

- Scarring
  - ALL surgical incisions leave a scar
  - Scarring is part of the normal healing process and usually fades in time
  - Every person heals differently
  - Some scars are more prominent and may even leave a KELOID (more likely in individuals with brown or black skin)
- Bleeding
  - bruising / wound hematoma often occurs around the incision
- Infection
  - Treated with antibiotics and possible prolonged wound care
  - Infection increases the risk of hernia recurrence
  - Mesh infection is very rare
  - If mesh becomes infected, it often needs to be removed surgically
- Recurrence (the hernia returns in the same location)
  - Typically, 1-3% chance when procedure done by experienced surgeon
  - Increased risk in obesity, smokers or previously repaired hernias
  - Weight loss and smoking cessation often advised before surgery
- Wound seroma (common if hernia is large)
  - Accumulation of a pocket fluid at hernia site
  - Feels like a persistent lump, similar to the hernia
  - Resolves spontaneously in most cases
- Organ injury
  - Major abdominal vessels
  - Intestines
  - Urinary bladder
- Nerve damage
  - Numbness below the incision is common
  - Sensation can gradually return, although numbness can be permanent
- Cardiorespiratory complications
  - Heart attack, stroke, Deep Vein Thrombosis / pulmonary embolus
  - Pneumonia
  - More common in the elderly and in patients with previous health issues

## **ANESTHESIA**

The specific risks of anaesthesia will be discussed with you by your anaesthesiologist before the surgery. The anesthesiologist will suggest the best type of anesthetic to keep you safe and comfortable during surgery. They will be with you during the entire procedure monitoring the level of sedation / unconsciousness, your vital signs, breathing, temperature and oxygen levels. The anesthetic is stopped at the end of the surgical procedure and the patient is then transferred to the recovery room.

Common anesthetic side effects include:

- Nausea or vomiting
- Dizziness
- Sore throat

**This document is not intended to take the place of any discussion with your surgeon about your need for hernia surgery. We encourage you to ask questions about any details that need clarification.**