

Laparoscopic Ventral Hernia Repair

Laparoscopic ventral hernia repair is a procedure to fix a bulge of tissue that pushes through a weak area of muscle in the abdomen (*ventral hernia*). A ventral hernia may be:

- Above the belly button. This is called an epigastric hernia.
- At the belly button. This is called an umbilical hernia.
- At the incision site from previous abdominal surgery. This is called an incisional hernia.

You may have this procedure as emergency surgery if part of your intestine gets trapped inside the hernia and starts to lose its blood supply (*strangulation*).

Laparoscopic surgery is done through small incisions using a thin surgical telescope with a light and camera (*laparoscope*). During surgery, your surgeon will use images from the laparoscope to guide the procedure. A mesh screen will be placed in the hernia to close the opening and strengthen the abdominal wall.

Tell a health care provider about:

- Any allergies you have.
- All medicines you are taking, including vitamins, herbs, eye drops, creams, and over-the-counter medicines.
- Any problems you or family members have had with anesthetic medicines.
- Any blood disorders you have.
- Any surgeries you have had.
- Any medical conditions you have.
- Whether you are pregnant or may be pregnant.

What are the risks?

Generally, this is a safe procedure. However, problems may occur, including:

- Infection.
- Bleeding.
- Damage to nearby structures or organs in the abdomen.
- Trouble urinating or having a bowel movement after surgery.
- Blood clots.
- The hernia coming back after surgery.
- Fluid buildup in the area of the hernia.

In some cases, your health care provider may need to switch from a laparoscopic procedure to a procedure that is done through a single, larger incision in the abdomen (*open procedure*). You may need an open procedure if:

- You have a hernia that is difficult to repair.
- Your organs are hard to see with the laparoscope.
- You have bleeding problems during the laparoscopic procedure.

What happens before the procedure?

Staying hydrated



Follow instructions from your health care provider about hydration, which may include:

- Up to 2 hours before the procedure – you may continue to drink clear liquids, such as water, clear fruit juice, black coffee, and plain tea.

Eating and drinking restrictions

Follow instructions from your health care provider about eating and drinking, which may include:

- 8 hours before the procedure – stop eating heavy meals or foods, such as meat, fried foods, or fatty foods.
- 6 hours before the procedure – stop eating light meals or foods, such as toast or cereal.
- 6 hours before the procedure – stop drinking milk or drinks that contain milk.
- 2 hours before the procedure – stop drinking clear liquids.

Medicines

Ask your health care provider about:

- Changing or stopping your regular medicines. This is especially important if you are taking diabetes medicines or blood thinners.
- Taking medicines such as aspirin and ibuprofen. These medicines can thin your blood. **Do not** take these medicines unless your health care provider tells you to take them.
- Taking over-the-counter medicines, vitamins, herbs, and supplements.

Tests

You may need to have tests before the procedure, such as:

- Blood tests.
- Urine tests.
- Abdominal ultrasound.
- Chest X-ray.
- Electrocardiogram (ECG).

General instructions

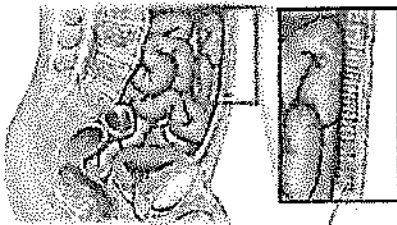
- You may be asked to take a laxative or do an enema to empty your bowel before surgery (*bowel prep*).
- **Do not** use any products that contain nicotine or tobacco for at least 4 weeks before the procedure. These products include cigarettes, chewing tobacco, and vaping devices, such as e-cigarettes. If you need help quitting, ask your health care provider.
- Ask your health care provider:
 - How your surgery site will be marked.
 - What steps will be taken to help prevent infection. These steps may include:
 - Removing hair at the surgery site.
 - Washing skin with a germ-killing soap.

- Receiving antibiotic medicine.
- Plan to have a responsible adult take you home from the hospital or clinic.
- If you will be going home right after the procedure, plan to have a responsible adult care for you for the time you are told. This is important.

What happens during the procedure?



Before surgery



After surgery

Mesh

- An IV will be inserted into one of your veins.
- You will be given one or more of the following:
 - A medicine to help you relax (*sedative*).
 - A medicine to numb the area (*local anesthetic*).
 - A medicine to make you fall asleep (*general anesthetic*).
- A small incision will be made in your abdomen. A hollow metal tube (*trocar*) will be placed through the incision.
- A tube will be placed through the trocar to inflate your abdomen with carbon dioxide. This makes it easier for your surgeon to see inside your abdomen during the repair.
- A laparoscope will be inserted into your abdomen through the trocar. The laparoscope will send images to a monitor in the operating room.
- Other trocars will be put through other small incisions in your abdomen. The surgical instruments needed for the procedure will be placed through these trocars.
- The tissue or intestines that make up the hernia will be moved back into place.
- The edges of the hernia may be stitched (*sutured*) together.
- A piece of mesh will be used to close the hernia. Sutures, clips, or staples will be used to keep the mesh in place.
- A bandage (*dressing*) or skin glue will be put over the incisions.

The procedure may vary among health care providers and hospitals.

What happens after the procedure?

- Your blood pressure, heart rate, breathing rate, and blood oxygen level will be monitored until you leave the hospital or clinic.
- You will continue to receive fluids and medicines through an IV. Your IV will be removed when you can drink clear fluids.

- You will be given pain medicine as needed.
- You will be encouraged to get up and walk around as soon as possible.
- You will be shown how to do deep breathing exercises to help prevent a lung infection.
- If you were given a sedative during the procedure, it can affect you for several hours. **Do not** drive or operate machinery until your health care provider says that it is safe.

Summary

- Laparoscopic ventral hernia is an operation to fix a hernia using small incisions.
- Tell your health care provider about other medical conditions that you have and about all the medicines that you are taking.
- Follow instructions from your health care provider about eating and drinking before the procedure.
- Plan to have a responsible adult take you home from the hospital or clinic.
- After the procedure, you will be encouraged to walk as soon as possible. You will also be taught how to do deep breathing exercises.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your healthcare provider.

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