PROCEDURE

Inguinal hernia repair

Inguinal hernia repair is surgery to close a weak area in the groin.

PURPOSE
To return tissue and strengthen the weakened groin

PROCEDURE TYPE
Therapeutic surgery, open or minimally invasive

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General, or local with moderate sedation for selected open repairs

HOW LONG IT TAKES
About 30-90 minutes

PREPARATION
Fasting and a medication review, including blood thinners

RECOVERY
Usually same day; no driving until safe and off opioids

MAIN RISKS
Chronic groin pain, recurrence, bleeding, infection

RESULTS
Repair confirmed immediately after surgery

Overview

Inguinal hernia repair is an operation to close a weak area in the lower abdominal wall, where the abdomen meets the groin. Fat or part of the intestine may push through this area and form a bulge.

The surgeon returns the tissue to the abdomen and strengthens the weak area. Most repairs use a synthetic mesh. Mesh acts as a supporting layer and lowers the chance of the hernia returning. A repair using stitches alone may be appropriate in selected cases.

The operation can be performed through one larger groin incision or several small abdominal incisions. Keyhole approaches are called laparoscopic or robotic repairs. Robotic repair uses laparoscopic instruments controlled by the surgeon from a console.

Why the procedure is performed

Repair may be offered when an inguinal hernia is painful, limits daily activity, is growing, or is difficult to push back into the abdomen. It may also be recommended when the risk of the intestine becoming trapped is a concern.

Urgent surgery is needed if tissue becomes trapped and loses its blood supply. This is called strangulation. A trapped hernia that cannot be pushed back is called incarceration.

Not every inguinal hernia needs immediate repair. Watchful waiting may be reasonable for some men whose hernia causes little or no discomfort. Many eventually choose surgery if pain or limitations increase.

Repair is generally recommended more readily for nonpregnant women with a groin hernia because a femoral hernia may be present. Femoral hernias occur slightly lower in the groin and have a greater risk of trapping tissue.

Who should and should not have it

You may be offered repair if the expected benefits are greater than the risks of surgery and anaesthesia. Your symptoms, examination, general health, work, activities, and personal preferences all matter.

Planned surgery may be avoided or delayed when:

A previous repair, hernias on both sides, or certain health conditions may affect which technique is recommended. A tissue-only repair may be considered if mesh is unsuitable or you decide against it after discussing the trade-offs.

Emergency repair should not be delayed when there are signs that intestine or other tissue is trapped or losing its blood supply.

- The diagnosis or type of groin hernia is uncertain
- A minimally symptomatic hernia can be safely monitored
- An infection or uncontrolled medical condition makes surgery less safe
- Blood-thinning treatment cannot yet be adjusted safely
- Pregnancy makes postponing repair reasonable
- The risks of anaesthesia or surgery outweigh the likely benefit

How to prepare

Your treating facility's own instructions take priority. They will tell you when to stop eating and drinking. Following these instructions reduces the risk of stomach contents entering your lungs during anaesthesia.

Give the surgical team a complete list of medicines, supplements, and allergies. Blood thinners like warfarin or apixaban , diabetes medicines, and some weight-loss medicines may need special planning. Do not stop a prescribed blood thinner unless the clinician managing your procedure tells you to do so.

Tell the team about previous reactions to anaesthesia, bleeding problems, heart or lung conditions, and any chance of pregnancy. Contact them if you develop a fever, chest infection, skin infection, or other new illness before surgery.

Arrange for an adult to take you home. If you will have general anaesthesia or sedation, you may also need someone to stay with you for the first night.

What happens during the procedure

For an open repair, the surgeon makes an incision over the groin. The protruding tissue is returned to the abdomen. The weakened area is then reinforced, usually with mesh, and the incision is closed.

Open repair may use general anaesthesia, meaning you are unconscious. Selected open repairs can use local anaesthetic to numb the area, often with sedation to make you relaxed and drowsy.

For laparoscopic or robotic repair, the surgeon makes several small abdominal incisions. A camera and surgical instruments are inserted, and the weak area is repaired from inside the abdominal wall. These approaches require general anaesthesia.

Laparoscopic repair may be helpful for hernias on both sides, a hernia that returned after an open repair, or when an earlier return to activity is important. The surgeon's experience and your individual circumstances also affect the choice.

The skin is usually closed with dissolving stitches, surgical glue, or dressings. You then move to a recovery area while the anaesthetic wears off.

Recovery and what to expect afterward

Groin soreness, bruising, and swelling are expected. Men may notice swelling or bruising of the

scrotum. Pain should gradually improve. Use prescribed or recommended pain relief as directed. Supporting the area with your hand when coughing or moving may help.

You can usually drink and eat once you are awake and not feeling sick. Start with light food if anaesthesia has caused nausea. Fluids, fibre, and movement can help prevent constipation, especially if you are taking opioid pain medicine.

Gentle walking is encouraged. Increase activity according to comfort and your surgical team's instructions. Avoid heavy lifting or strenuous exercise until the team says it is safe. Advice may differ based on the repair and your work.

Do not drive home. Resume driving only when you are no longer taking medicines that impair alertness, can wear a seat belt comfortably, and can make an emergency stop without pain or hesitation.

People with desk-based jobs may return sooner than those whose work involves lifting or strenuous movement. Some people go home the same day; an overnight stay may be needed after complex or emergency surgery or because of other health needs.

Risks and possible complications

Possible complications include:

Long-lasting groin pain can occur because nerves or tissues remain irritated. Mesh can rarely become infected, move, or contribute to ongoing pain. Further treatment or mesh removal is sometimes considered for serious mesh-related problems.

In men, injury to the blood supply of the testicle or to the tube carrying sperm is uncommon but possible. Your surgeon should explain risks that are especially relevant to your planned technique and health.

- Bleeding, bruising, or a collection of blood called a haematoma
- A temporary fluid collection called a seroma
- Wound or mesh infection
- Difficulty passing urine after surgery
- Ongoing numbness, altered sensation, or groin pain
- The hernia returning
- Injury to nearby blood vessels, nerves, bowel, bladder, or spermatic cord
- Anaesthetic complications or a blood clot

Results and follow up

The surgeon can usually confirm immediately that the hernia was repaired. There is normally no laboratory result to wait for unless tissue was removed and sent for examination.

Before discharge, you should receive instructions about wound care, bathing, pain medicine, activity, and follow-up. A routine appointment may be used to check healing and discuss any ongoing pain or swelling.

A small, soft lump can remain temporarily because of swelling or fluid. This does not automatically mean the hernia has returned. Mention a persistent or enlarging bulge at follow-up.

Alternatives

The main alternative is watchful waiting. This means monitoring the hernia and choosing surgery later if pain, growth, or activity limits develop. It avoids an operation now but does not repair the weak area, and symptoms may increase over time.

A supportive garment called a truss may hold the bulge in place temporarily. It does not repair the hernia and may be uncomfortable or ineffective. It should be fitted carefully and should not delay assessment of worsening symptoms.

Open, laparoscopic, and robotic operations are alternatives to one another. Keyhole surgery may allow a quicker early recovery and can repair both sides through the same small incisions, but it requires general anaesthesia. Open repair can sometimes use local anaesthesia but leaves a larger groin incision.

Mesh repair has a lower risk of recurrence than many stitch-only techniques. Tissue-only repair avoids permanent mesh but may carry a greater chance of recurrence and requires a surgeon experienced in that method.

When to call your healthcare team

Contact your surgical team promptly if you have increasing rather than improving pain, spreading redness, pus or bad-smelling drainage, fever, repeated vomiting, difficulty passing urine, or swelling that is rapidly worsening.

Seek urgent medical assessment before surgery if the bulge becomes suddenly painful, firm, tender, or impossible to push back, especially with vomiting, abdominal swelling, or difficulty

passing stool or gas. These can be signs of trapped tissue.

After surgery, seek emergency help for trouble breathing, chest pain, fainting, confusion, or sudden severe weakness.

Mild bruising, manageable soreness, and a small amount of clear or blood-stained wound fluid can be part of routine recovery. Follow the facility's instructions if you are unsure whether a change needs review.

Common questions

Will I be asleep?

You will be asleep under general anaesthesia for laparoscopic or robotic repair. Open repair may use general anaesthesia or local anaesthetic with sedation.

Can I drive home?

No. Arrange for someone to take you home. Do not resume driving until you can control the vehicle safely and are no longer affected by sedating pain medicine.

How painful is it?

Soreness is expected, especially when standing, coughing, or changing position. It should improve over the following days. Pain that becomes severe or keeps worsening needs medical advice.

When will I know if it worked?

The surgeon confirms the repair during the operation. Healing takes longer, so swelling and discomfort may remain for a while.

Will I have mesh?

Most inguinal hernia repairs use mesh, but not all do. Ask which material and technique are planned, why they are recommended, and whether a tissue-only repair is reasonable for you.

Sources

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