Making a decision about **inguinal hernia**

What is this leaflet?

This leaflet is for people with an inguinal hernia. It is designed to help you decide between treatment options. You should go through it and then talk to your healthcare professional. There are some parts you can fill in to prepare for your next appointment.

Pages 1 & 2 are about inguinal hernia

Pages 3 – 9 help you make a decision

Pages 3 & 10 are for you to fill in

Page 11 has links for information

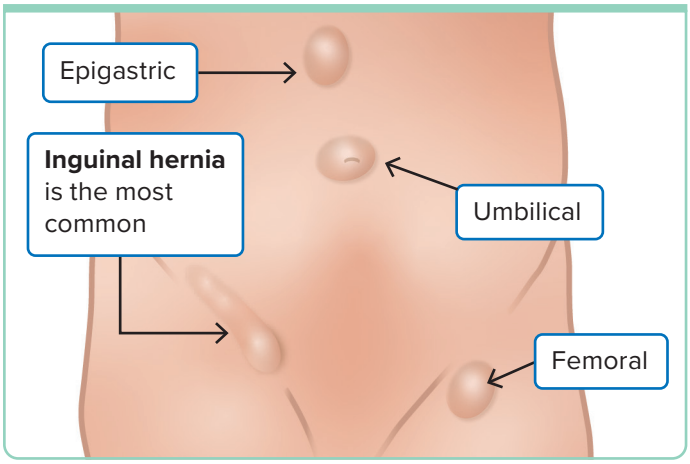
Pages **3, 9** and **10** are useful to share with your **healthcare professional**

What is an inguinal hernia?

A **hernia** happens when there is a weak spot in a muscle in the body and something such as your intestine (gut) or fat pushes through. An **inguinal** (pronounced ING-win-ul) **hernia** is one that happens in the inguinal canal.

The inguinal canal is like a tunnel just above the groin. In women, it has a ligament that helps hold the uterus (womb) in place. In men, it leads to and from the testicles. It is an area that does not have much muscle and is naturally weak.

Types of hernia



What can I do about an inguinal hernia?

Do nothing or watch and wait

Things I can do myself

Surgery open or keyhole mesh or stitches

25 out of every **100** men

2 out of every **100** women

will get an inguinal hernia in their lifetime

Hernias will not go away on their own and normally continue to get bigger.

Everyone's hernia is different

- You might have a swelling or a 'soft squidgy lump' in the groin that comes back in the same place if you try to push it in.
- Sometimes the hernia seems to disappear when you lie down.
- Sometimes you have pain or discomfort or swelling.
- Sometimes your doctors find a hernia that is not causing you problems, when doing a scan.

2 About inguinal hernia pain

Hernias do not always cause pain but they often get bigger.
If your hernia is not causing you pain or discomfort, advice is to **'watch and wait'** – look for changes and see your doctor if you start to have pain, discomfort or the size of your hernia starts to cause you problems.

Hernia pain can be different for everyone

You might have:

- pain or discomfort in your groin, especially when bending over, coughing or lifting
- burning or aching in the groin
- heavy or dragging sensation in your groin
- digestive problems such as constipation

In men, an inguinal hernia can cause pain, numbness or tingling in the scrotum.

Out of every 100 with an inguinal hernia around **30** have some pain or **discomfort, 70** do not.

30 have **pain or discomfort** **70** do not

How to push a hernia back in

You should be able to push a hernia back in. Lie down or get in a resting position and gently push the hernia back in with the tips of your fingers or palm of your hand. Do not try to do it while standing.

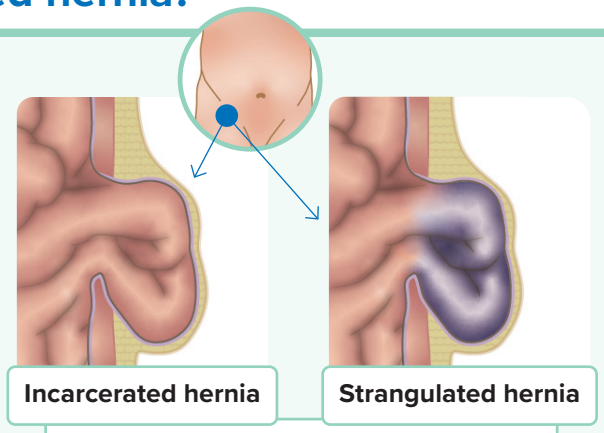
What is an incarcerated or a strangulated hernia?

An **inguinal hernia** is when part of the intestines or fat poke through a '**window**' of weakness in the inguinal canal.

If that 'window' suddenly clamps shut, with fat or intestine poking through, it gets stuck and can't be pushed back in. This is an **incarcerated hernia.**

If the tissue that is stuck (incarcerated) contains blood vessels such as veins, it can be life threatening unless it is treated. This is a **strangulated hernia.**

About **2 – 3** in every **100** in the first year **strangulate**. This risk becomes less after 1 year.



Incarcerated and strangulated hernias can be life threatening

When to go to A&E, call 111 or seek urgent medical help

If you have a hernia and any of the following

- You are not able to move your bowels (poo) or pass gas or if you have blood in your poo.
- Nausea, vomiting, or both.
- Sudden hernia pain that gets worse quickly.
- Your hernia bulge turns red, purple or dark.

Explain that you have a hernia. You can show them this page of the leaflet.

These symptoms are not specific to a hernia. They might be due to something else.

3 What's important to you?

Your personal feelings are important.

What you choose to do about your hernia will depend on how it is affecting your life and other things about you. You might want to use this page to note down how you feel. Your doctor can understand how best to help you if you share this page with them.

You could complete this page regularly to keep a diary of how your hernia is affecting you.

	Put an '✘' where it applies to you No / not at all ← → Yes / a lot
My hernia affects what I can do day-to-day, such as: taking a shower, making the bed, making meals	
My hernia affects my self-esteem or body image	
My hernia is interfering with sexual intimacy	
My hernia is affecting me socially, e.g. loss of social life	
I worry about having surgery	
My hernia is affecting my mental health or making me anxious	
My hernia is affecting me financially, e.g. ability to work, prescription costs or cost of binders	

What kind of work do you do, or, how do you spend most of your day?

You can circle more than one: **standing** **sitting** **physical labour** **housework** **childcare**

What is bothering you most about your hernia at the moment and how is it bothering you?

Thinking about your hernia pain

Pain is very individual. You might want to think about how your hernia affects you over time. Is it getting worse each week or month?

Mark your pain from **1 (no pain)** to **5 (severe pain)** when you are

lying down	☐	moving from sitting to standing	☐	coughing or breathing deeply	☐
bending over	☐	doing daily activities	☐	walking up and down stairs	☐
sitting up	☐	walking or standing	☐	exercising	☐

4 What can I do about a hernia?

Do nothing or watch and wait

Things I can do myself

Surgery open or keyhole mesh or stitches

Do nothing or watch and wait

You can always choose to 'do nothing', not have any treatment, even if you have symptoms.

'Watch and wait' is when you look out for changes or increased hernia pain. Usually you would let your doctor know if the size starts to cause you problems, it is more painful, or does not go back in when you lie down. You can use page 3 to help you monitor changes.

Medical advice is to 'watch and wait' if your hernia is not causing you pain or discomfort.

Things I can do myself

Keep active – exercise can help, but it can be difficult when you have a hernia. A general rule is not to do anything which makes you feel uncomfortable or causes pain, or puts stress around the area of your hernia. You can get specialist advice from your healthcare professional. If you are finding it difficult to be active there are seated activities you can try.

Hernia belt or support clothing – some people find a hernia belt (truss) or abdominal binder helps. Put a binder or truss on while you are lying down and your hernia is reduced (pushed in). You might be able to get these on prescription from your healthcare professional.

Eating – constipation can cause pain around your hernia. Eating more fibre (wholegrains, fruit and vegetables, beans and pulses) and staying hydrated can help.

Sleeping – it can be difficult to find a comfortable sleeping position. Cushions or maternity pillows as support can help. Or put a pillow under your knees if you sleep on your back.

Pain and discomfort – hernias can be uncomfortable but shouldn't be overly painful. It can be useful to keep the things to hand that help you when you get pain. For example ice packs, hot water bottle, warm wheat bags, cold spray, pain relief.

Being a healthy weight – weight loss can be really difficult. Your healthcare team can help you. Obesity increases pressure in the abdomen (tummy), and on the hernia, which can make symptoms worse. If you have surgery, extra weight increases pressure on the repair and can result in another hernia. Obesity can make surgery more difficult and increase the risk of infection afterwards. Look for healthy lifestyle programmes run by your local health authority.

Mental wellbeing – hernias can affect your well-being. You might want to get in touch with a support group such as the Facebook Hernia Patients Support Group where you can find people who are going through the same thing.

Some people find mindfulness or other relaxation techniques helpful.

These are all things you can change. Aim for bite-sized goals. Doing one thing consistently over time is better than doing different things for shorter periods of time. Think about which changes you are able and willing to make and what is achievable for you.

5 What if I'm offered surgery?

Everyone's hernia is different. Everyone's personal situation and health is different

If your hernia is causing you pain and affecting your life, you might choose to have surgery. The aim of surgery is to reinforce the tear in the muscle that is causing the hernia, reduce the chance of it coming back and help with pain and discomfort.

Sometimes surgery helps with pain, sometimes you still have pain after surgery.

Although you have a hernia, something else may actually be causing the pain. You might have surgery to fix your hernia but the pain doesn't go away.

You can see how well surgery might work on pages 8 – 9

The type of surgery you will be offered will depend on

Your hernia – where it is, whether you have more than one, how big it is.

Your situation – whether you had a hernia in the past or other surgery in your abdomen (tummy), how fit and healthy you are, whether you have other health conditions.

Your surgeon – each surgeon is more experienced in one or another way of doing the surgery. How successful your surgery will be relies in part on this experience and expertise.

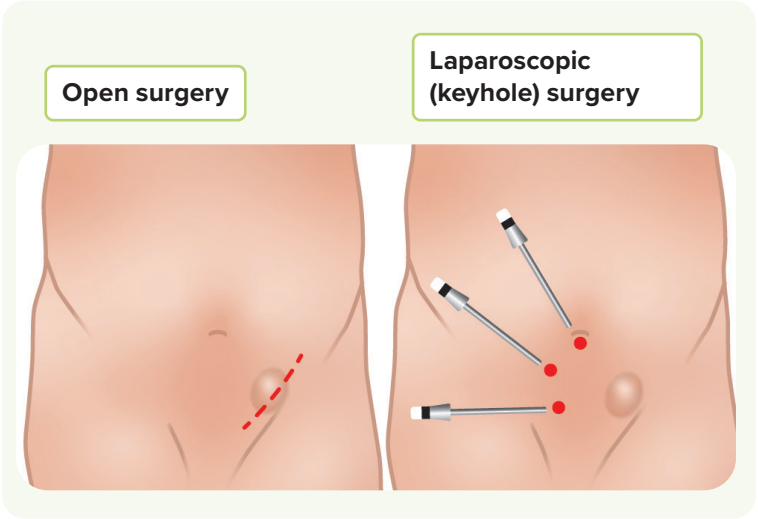
It's ok to ask your surgeon about which technique they use. It's ok to ask to speak to another surgeon who does a technique that you want to know more about.

If you want to speak to someone else you might have to wait for the appointment. You might wait longer for the surgery. You might need to travel to a different hospital. But it is fine to ask to speak to someone else.

The choices around your surgery include

- whether to have surgery or not
- type of surgery; open or laparoscopic (keyhole)
- type of anaesthetic: general (you will be asleep), or local (you will be awake)
- mesh or tissue repair (stitches) of the hernia
- type of mesh

You can read about these on the next pages to help you decide.



6 Open or keyhole surgery?

Which surgery you will be offered will depend on the kind of hernia you have, your preferences, and other things about you and your health.

Open surgery

Often offered for more complex or larger hernias or if you do not want a general anaesthetic.

Your surgeon makes one cut of about 8 – 10cm in your groin. They find the hernia, push it back into place, close the hole with stitches or reinforce it with a mesh.

Can be done with **local anaesthetic** (you are awake but you will not feel pain). Usually it is **general anaesthetic** (you are asleep).

Laparoscopic (keyhole) surgery

Often offered if you have a hernia on both sides or you have had a hernia repair before.

Your surgeon makes 3 or 4 small cuts (less than 2 cm) in your abdomen (tummy).

They use long tools to push the hernia back in and cover the hole with a mesh. Stitches cannot be used in keyhole surgery.

Sometimes you have bloating or shoulder pain after keyhole surgery. This is due to the gas used to inflate your abdomen (tummy) during surgery.

Is always done with a **general anaesthetic** (you will be asleep).

How are the cuts in my abdomen (tummy) or groin closed?
With dissolvable stitches, glue, staples, or stitches that need to be removed later.

How long are the operations?
They both take between 30 – 90 minutes.

When can I go home?
You can usually go home the same day.

How long will it take to recover from surgery?

Advice is to increase activity slowly over the 4 weeks after surgery. You should be fully recovered 4 – 6 weeks after either type of surgery (keyhole or open).

Everyone recovers differently. An example recovery schedule might look like this:

Days 1 – 5 normal light daily activities such as walking around the house or getting dressed.

Days 3 – 6 picking up heavy items might be possible, for example a toddler or a bag of shopping. 'Lift from the knees' (bend your knees to pick things up). You can shower after 3 days if you keep your wound dry and clean.

2 – 4 weeks you can drive as soon as you can safely perform an emergency stop without pain. You can take a bath or go swimming.

4 – 6 weeks you should be fully recovered and be able to lift things and drive a car.

If you exercised before surgery, gradually build back up to full exercise over **4 – 6** weeks.

7 Deciding about surgery

	Do nothing or watch and wait	Open Surgery	Keyhole Surgery
Does pain get better or not? (Out of every 100 people)			
How many have moderate pain (for 3 – 12 months)?	**8** do / **92** do not	**3 – 20** do / **80 – 97** do not	**3 – 15** do / **85 – 97** do not
How many have severe pain affecting their day to day life (2 years later)?	**4** do / **94** do not	**1 – 2** do / **98 – 99** do not	**Less than 1** does / **More than 99** do not
How many have permanent numbness or pain?	**n/a**	**13** do / **87** do not	**7** do / **93** do not
Potential risks of surgery (Out of every 100 people)			
How many have a haematoma (large painful bruise)? This usually goes away on its own in about 3 months.		**4 – 15** do / **85 – 96** do not	**1 – 9** do / **91 – 99** do not
How many have a seroma (a pocket of fluid)? It can be hard and painful. It should be absorbed back into your body gradually over a few months. Sometimes it is drained by your surgeon.		**4 – 11** do / **89 – 96** do not	**6 – 7** do / **93 – 94** do not
How many have problems emptying their bladder? This is a risk of any surgery and is treated with a urinary catheter.		**1 – 10** do / **90 – 99** do not	**1 – 10** do / **90 – 99** do not
How many people's wound gets infected and need treatment?		**2 – 3** do / **97 – 98** do not	**2 – 3** do / **97 – 98** do not

Effects on testicle and sperm – There has been a lot of research recently. There is no evidence that it is normally a problem. If you're male, having surgery on both sides of your groin and want to have children, talk to your surgeon.

8 About mesh and stitches

What is tissue repair or stitches?

Very few people in the UK are currently trained to repair an inguinal hernia with stitches. If this is something you want to know more about, ask your surgeon.

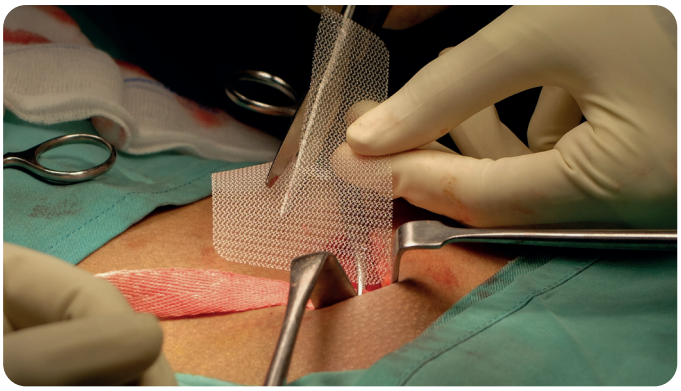
What is mesh?

Mesh is flat material that is used to patch or cover the hole in the muscle wall. It is fixed in place inside the body with very fine stitches, glue or staples. Mesh acts like a scaffold and your own body grows through the mesh making the weak point stronger.

There are many **different kinds of mesh, of different thicknesses, strength, flexibility, size and shape**. Your surgeon will choose which one they prefer to use and is best for your situation. You can ask them about which mesh they plan to use and why.

There are different types of synthetic mesh: polypropylene, polyester, expanded polytetraflouroethylene (ePTFE), and partially absorbable with proplylene and polyglactin.

Biological mesh is mesh made from animal or human cells. It is not usually used for inguinal hernias because it is re-absorbed by the body in about 6 months which means your hernia can come back more easily.



Potential risks of mesh

Which mesh you will be offered will depend on the size of your hernia, experience of your surgeon and other things about you and your health.

Out of every 100 people with a mesh repair

How many **hernias came back** within 3 years?	**2 – 3** did / **97 – 98** did not
How many had a **seroma**?	**2 – 8** did / **92 – 98** did not
How many had **infection** of the mesh?	**less than 1** did / **more than 99** did not
How many had a **rejection**, **shrinkage** or **migration** of the mesh?	**No good data available**
How many had **allergic** or **autoimmune** reaction to mesh?	**none** did / **100** did not

9 Deciding about surgery

Potential risks of anaesthetic

Whether you are offered general or local anaesthetic will depend on your personal health situation, your preferences, and which surgery you choose.

Your anaesthetist (pain doctor) will explain more about the risks of each type of anaesthetic for you.

General anaesthetic

A general anaesthetic is where you are asleep during the operation.

How many feel thirsty, have a sore throat, feel sick, have bruising or shivering due to the anaesthetic?

60 – 65 in every **100** do

35 – 40 do not

How many have problems remembering, brain fog or emotional changes?

Temporary (1 month)

10 in every **100** do — **90** do not

Longer term (1 year or more)

1 in every **100** do — **99** do not

When do hernias happen?

Hernias often happen due to some strain or pressure such as constipation or a bad cough, or if you regularly lift heavy things, walk or stand for long periods, or you have problems when you pee, like straining.

Hernias are more likely if you have family with a hernia, had prostate surgery (males), have a connective tissue disorder or a health condition that makes you cough.

Your decision

I know enough about the potential benefits and harms of each option	Y / N
I am clear about which potential benefits and harms matter most to me	Y / N
I have enough support and advice to make a choice	Y / N
I feel sure about the best choice for me	Y / N
I need more information to make this decision	Y / N
I have decided what to do next	Y / N

Which options are you considering?

Do nothing or watch and wait	Things I can do myself	Open or Keyhole Surgery
☐	☐	☐

Do you know anyone who has tried these options? Y / N

10 Preparing for your appointment

Contacts

Name of GP / Surgeon

Contact details

Who to ring in case of emergency

Next Steps

Date

When will I be reviewed next?

What will happen next?

At your appointment

You might want to write down questions to ask, or information from your appointment. It's ok to take notes.

Example questions to ask your surgeon

Will my hernia get worse?

Who do I contact if I'm worried?

What if I decide to wait to have surgery?

How long might I wait for surgery?

What is your success rate? What is the success rate of this hospital?

Do you recommend mesh for me? Which mesh? Why have you chosen this one? Do you use it for everyone or have you chosen it specifically for me?

How will you fix the mesh in place?

How will you close the incision(s) (cut)?

Will I lose my belly button?

Before surgery your specialist might ask you

For a list of your prescriptions and doses

Whether you have anyone in your family with an inguinal hernia

If you have someone at home to help you after surgery

Details about any operations you have had in the past

After surgery you might want to ask

What has been done?

What kind of mesh did I have?

How did you close my wound – do I need to have any stitches or staples removed?

Did you need to do anything you weren't expecting to do?

11 More information

Where can I go for more information?

British Hernia Society www.britishherniasociety.org

NHS pages www.nhs.uk/conditions/inguinal-hernia-repair/

Hernia Patient Support Group www.facebook.com/groups/262467366015030
This group is run by patients and some doctors. Anyone can post to it. It is not endorsed or moderated by the NHS.

About NHS waiting times Read more about NHS waiting times for treatment
www.nhs.uk/nhs-services/hospitals/guide-to-nhs-waiting-times-in-england/

Mental wellbeing help www.nhs.uk/conditions/stress-anxiety-depression

British Heart Foundation Eating Well
www.bhf.org.uk/informationsupport/support/healthy-living/healthy-eating

Preparing for surgery 'Fitter Better Sooner'
https://rcoa.ac.uk/patients/patientinformation-resources/preparing-surgery-fitter-better-sooner/

How many people have a hernia?

Data from nearly 2 million people in Oxfordshire in the 1970 & 80s published in 1996: https://doi.org/10.1093/ije/25.4.835

How many have pain or discomfort from their hernia?

Data from a study of 323 patients in the UK from 2002:
https://doi.org/10.1046/j.1365-2168.2002.02186.x

How many suffer a strangulated hernia?

Data from two studies in the 1990s:
https://doi.org/10.1111/j.1445-2197.1998.tb04837.x and
https://doi.org/10.1002/bjs.1800781007

Outcomes of having mesh

Studies pulling together the data from lots of smaller studies, from 2014:
https://doi.org/10.1001/jamasurg.2013.5014 and 2001
https://doi.org/10.1002/14651858.CD002197

Data on infection of the mesh from a summary on the topic published in 2011: https://doi.org/10.1016/j.jviscsurg.2011.09.005

Outcomes of having open or keyhole surgery

A study in 720 men in the USA from 2006:
https://doi.org/10.1001/jama.295.3.285
(data on pain, haematoma, wound infection, urinary retention)

A study in 928 people in the UK from 1999:
https://doi.org/10.1016/S0140-6736(98)10010-7
(data on pain, effects on testicles and sperm, haematoma, seroma, wound infection, urinary retention)

A study in 1370 people in Sweden from 2010:
https://doi.org/10.1002/bjs.6904
(data on pain)

A study in 867 people in Sweden from 2007:
https://doi.org/10.1007/s10029-007-0214-7
(data on pain)

A study in 528 people in the USA from 2006:
https://doi.org/10.1097/01.sla.0000217637.69699.ef
(data on pain)

A study in 528 people in the UK from 1994:
https://doi.org/10.1016/S0140-6736(94)92148-2
(data on haematoma)

A study in 528 people in the UK from 1997:
https://doi.org/10.1056/NEJM199705293362201
(data on urinary retention)

A pulling together of data from all studies up until 2003:
https://doi.org/10.1002/14651858.CD001785
(data on pain, numbness in the groin, haematoma, seroma)

Anaesthetic risks

Perioperative Quality Improvement report 2023 (p37)
https://pqip.org.uk/FilesUploaded/PQIP-Report2023_Final%20version_140623.pdf

For declarations of conflicts of interest, to see other decision support tools in the series, or to find out more about how this one was created, go to:
https://www.england.nhs.uk/personalisedcare/shared-decision-making/decision-support-tools/

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