

Patient information from the BMJ Group

Fibroids

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Fibroids

Many women have fibroids. They are lumps that grow in your womb. They sometimes cause heavy or painful periods. But most women with fibroids don't get any symptoms.

We've brought together the best research about fibroids and weighed up the evidence about how to treat them. You can use our information to talk to your doctor and decide which treatments are best for you.

What are fibroids?

Fibroids are lumps that grow in your womb. They're not cancer and they don't usually cause any problems. We're not sure why women get fibroids, but they're common.

If you have heavy periods, painful periods, or a feeling of fullness or discomfort in your pelvis, you may want to get checked by your doctor to see if you have fibroids.

If you have fibroids and they're causing problems, there are treatments that can help. The best treatments involve surgery. But if you're nearing the menopause (when your periods stop), you may choose to wait. Fibroids often get better on their own around this time.

Key points for women with fibroids



You can have a simple test to find out whether you have fibroids.

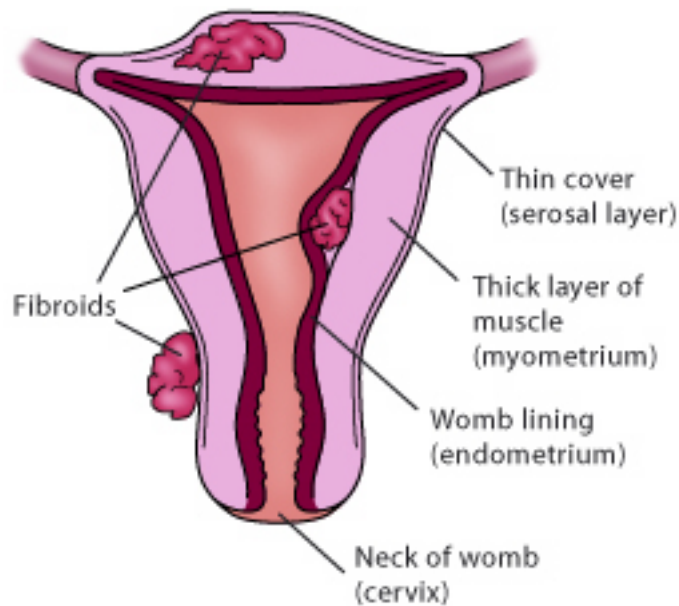
- Fibroids are very common and are usually harmless.

Fibroids

- As many as 3 in 4 women may have fibroids. But less than half of these women have symptoms.
- The most common symptoms are heavy periods, painful periods, or a feeling of fullness or discomfort in your **pelvis** .
- Fibroids are easy to diagnose. Doctors usually diagnose them with an **ultrasound scan** .
- Fibroids don't usually stop you getting pregnant or cause problems during your pregnancy.

Your womb

To understand what happens if you have fibroids, it helps to know more about your womb. Your doctor may use the word uterus. This is another word for womb.



Your womb has three layers:

- The inner layer is the lining (or **endometrium**)
- In the middle is a thick layer of muscle called the **myometrium**
- The outside has a thin cover called the **serosal layer**.

Fibroids can grow in the lining and the muscle, and just below the serosal layer.

Every month, the lining of your womb grows thicker to get ready for pregnancy. This is controlled by two **hormones** called oestrogen and progesterone.

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If you don't get pregnant, the lining of your womb falls away and you bleed from your vagina. This is your monthly period.

The changes in your womb lining are part of your menstrual cycle. This is the monthly set of events that causes an egg to come out of your ovaries. It also causes your period to happen if you aren't pregnant.

To learn more, see [What happens every month](#) .

What happens if you have fibroids?

Fibroids are lumps that grow in your womb. They are made of the same cells that form certain kinds of muscles. Doctors sometimes call them tumours, but fibroids aren't cancer and don't turn into cancer.

You can have just one fibroid or many. The average number is six.^[1] They can be tiny, about the size of a pinhead. Or they can grow to be large, sometimes as big as a balloon.^[2] The average size is around 2 centimetres (two-thirds of an inch).^[1] They usually grow slowly.^[3]

They can grow:^[3]

- On the inside of your womb, just under the lining
- In the layer of muscle
- On the outside of your womb, just under the cover.

But very often fibroids are what doctors call 'mixed'. This means they grow into different parts of your womb.

What causes fibroids?

Doctors don't know what causes fibroids. The hormone oestrogen seems to make them grow.^[4]

When you go through the menopause, your body stops making so much oestrogen. So your fibroids start to shrink. If you have a treatment called **hormone replacement therapy** (HRT for short), your fibroids may start growing again.^[5]

Fibroids: why me?

We don't know why some women get fibroids and others don't. But we do know that some things make it more likely that you'll get them. These are called risk factors.

You're more likely to get fibroids if:

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- You are of childbearing age (you're most likely to get fibroids in your 30s or 40s) ^[3] ^[7] ^[8]
- You started having your periods early (before about 12) ^[3] ^[7]
- You don't have any children ^[9] ^[10]
- You had your last child at a young age ^[9]
- You're very overweight ^[10]
- Someone in your family has fibroids ^[3] ^[7]
- You are African-Caribbean. Black women are three times more likely than white women to have fibroids. ^[3] ^[7]

You're less likely to get fibroids if:

- You've had children. Women who have had five children have only one-fifth of the risk of getting fibroids compared with women who haven't had any children ^[10]
- You had your last child when you were over 35 ^[11]
- You've used the contraceptive pill. And the longer you use it, the less likely you are to get fibroids. ^[12] For example, women who have used the pill for 10 years are almost one-third less likely to get fibroids ^[10]
- You've had injections of a contraceptive called medroxyprogesterone (brand names include Depo-Provera) at a dose of 150 milligrams. ^[13] This drug reduces your chances of getting fibroids for at least 10 years after the last injection
- You're past the menopause. ^[9] After the menopause, you're much less likely to get fibroids. ^[11]

What are the symptoms of fibroids?

Fibroids don't usually cause symptoms.

Less than half of women with fibroids have any symptoms. ^[14] But some women do, and we've looked at the most likely ones. ^[15]

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- Heavy periods: about one-third of women with fibroids have heavy bleeding during their periods. ^[14] (To read more, see [How can I tell if my periods are heavy?](#))
- Painful periods: you may get bad cramps just before or during your periods.
- Pain or pressure in your pelvis: about one-third of women with fibroids have a feeling of fullness or discomfort in their **pelvis** when they're not having their periods. ^[14]
^[16]
- Having to pass urine often: if you have to pass urine often, your fibroids may be pressing on your **bladder** . ^[16]
- Pain during sex: this can happen if your fibroids are near the neck of your womb (your **cervix**).

How bad your fibroids make you feel depends on: ^[14]

- How many you have
- How big they are
- Where they are.

Most women who have fibroids don't get any symptoms.

Many women only find out they have fibroids when they have routine **ultrasound scans** because they're pregnant. If you don't have any symptoms, you probably don't need treatment.

How do doctors diagnose fibroids?

If your doctor thinks you may have fibroids, he or she will probably ask you about your symptoms and how they affect you. You may be asked about your periods and your sex life.

Your doctor may also want to feel your womb (your uterus) by putting a finger in your vagina and a hand on your abdomen. If you have fibroids, your womb may feel large and lumpy.

You may also need to have tests to check whether you have fibroids. Your doctor may send you to see a specialist.

Blood test

If you have been having heavy periods, your doctor may want to check you're not anaemic by taking a blood test. If you're anaemic, you have too few **red blood cells** . You may look pale and get tired easily.

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Seeing a specialist

Your doctor may send you to see a specialist who can do other tests to check if you have fibroids. The specialist may recommend you have a scan. A scan is a way of taking a picture of the inside of your body. In this case, a picture is taken of the inside of your womb, to show if you have fibroids. You may have either an ultrasound scan or an MRI scan. Both types of scan are painless and are considered safe, with no side effects.

Ultrasound scan

An ultrasound scan uses sound waves to build a picture of the inside of your womb. While you are lying down, the doctor moves a special gadget over the skin of the lower part of your abdomen. This gives off and picks up sound waves and turns them into pictures of the inside of your pelvis.

There are two types of ultrasound scan:

- A scan that looks through your vagina (transvaginal ultrasound)
- A scan that looks through your abdomen.

The scan through your vagina is better for telling if you have fibroids.^[34] It's as good as an MRI scan for finding fibroids and telling how big they are.^[34]

Your doctor puts a **probe** into your vagina. It's shaped like a tiny flashlight with a round end. It sends out sound waves that bounce off the organs in your **pelvis** to give a picture.

Many women find out they have fibroids when they have routine ultrasound scans because they're pregnant. Doctors are less worried than they used to be about the effects of fibroids in pregnancy.^[15] In 4 out of 5 women who are pregnant, fibroids stay the same size or shrink.^[15] The ones that do grow usually grow only a little.

To learn more, see [Fibroids and pregnancy](#) .

MRI scan

If you have an MRI scan, you lie inside a giant magnet that makes pictures of the inside of your body. The scan shows all the organs in the lower part of your abdomen, including your womb and any fibroids in it.

How common are fibroids?

We're not sure how common fibroids are. Lots of women with fibroids don't have any symptoms, so they don't see a doctor. Also, studies looking at how common fibroids are have used different ways of diagnosing them.

- A study using ultrasound scans found that about 1 in 20 women between the ages of 25 and 40 had fibroids. Older women were more likely to have fibroids than younger women.^[17]

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- Other studies have found that as many as three-quarters of older women have fibroids. ^[1]

Black women are three times more likely to have fibroids than white women. ^[18] But we don't know why.

Fibroids are the most common reason for women to have their womb removed (a **hysterectomy**) or other surgery in the same area. ^[19]

What treatments work for fibroids?

Fibroids are lumps that grow in your womb. They aren't cancer and they don't turn into cancer. In fact, they're usually harmless. But they can cause heavy or painful periods or a feeling of fullness or discomfort in your pelvis.

If you have fibroids and they're causing problems, you have a choice of good treatments. The ones that are likely to work best involve surgery. But if you're getting close to the **menopause**, you may choose to wait. Fibroids usually get better on their own at that time.

Key points about treating fibroids

- Your fibroids can be treated with hormone treatments, surgery, or both.
- You can also have treatments that can reduce pain.
- Hormone treatments will probably make your fibroids shrink and help your symptoms, but they have side effects. You can't take them for more than six months, and your fibroids will probably grow back afterwards.
- You can have surgery to take out just your fibroids (a myomectomy) or surgery to take out your womb (a hysterectomy), with the fibroids in it.
- Taking hormone treatments before surgery may make these operations easier.
- Fibroids don't usually grow back after they've been removed.
- You'll have less pain after keyhole surgery to remove your fibroids (laparoscopic myomectomy) than after an operation that is done through a bigger cut (abdominal myomectomy). You should recover faster too.
- Your fibroids won't grow back after a hysterectomy. But it's a big operation, and you can't have children afterwards.

Which treatments work best? We've looked at the research and given a rating for each treatment according to how well it works.

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For help in deciding what treatment is best for you, see [How to use research to support your treatment decisions](#).

Treatment Group 1

Treatments for fibroids

Treatments that are likely to work

- [Hormone treatments](#) : These drugs, known as gonadotrophin-releasing hormone (GnRH) analogues, make your fibroids shrink. Examples (and brand names) are goserelin (Zoladex), leuprorelin (Prostap SR), buserelin (Suprecur), and nafarelin (Synarel). Taking progestogen hormone replacement therapy, a drug called raloxifene (Evista), or tibolone (Livial) at the same time reduces the chances that you'll get side effects from taking GnRH analogues. [More...](#)
- [Surgery to remove your fibroids](#) : This operation is called a myomectomy. It lets you keep your womb, so you can still have children. [More...](#)
- [Surgery to remove your womb](#) : This operation is called a hysterectomy. You can't have children afterwards. Your doctor may suggest it if other treatments haven't worked. [More...](#)
- [Hormone treatments before surgery](#) : These are drugs that shrink your fibroids, making surgery easier. [More...](#)

Treatments that need further study

- [Surgery to remove the lining of your womb](#) : This operation is called endometrial ablation or endometrial resection. There are various ways of doing this surgery, including thermal balloon endometrial ablation. It uses a hot balloon to destroy the lining of your womb. [More...](#)
- [Nonsteroidal anti-inflammatory drugs \(NSAIDs\)](#) : These drugs ease pain and can lighten blood flow during some kinds of heavy periods. Some examples (and brand names) are ibuprofen (Nurofen) and ketoprofen (Orudis). [More...](#)
- [Having a coil fitted](#) : This is also called an intrauterine device. The brand name is Mirena. It can make your periods lighter. [More...](#)
- [Getting rid of fibroids with ultrasound](#) : This treatment uses high-energy sound waves to destroy fibroids. It's not widely available in the UK. [More...](#)
- [Getting rid of fibroids with a laser](#) : This treatment uses lasers to destroy fibroids. It is only available in a few specialist treatment centres in the UK. [More...](#)

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Other treatments

We haven't looked at the research on this treatment in the same detail we have for the other treatments on our site. (To learn more, see Our method.) But we've included some information because you may have questions about it.

- [Uterine embolisation](#) : This treatment blocks the blood supply to fibroids with the aim of making them shrink. [More...](#)

What will happen to me?

If you have fibroids, you may wonder what will happen to you. A lot depends on whether you have treatment. Here's what we know from the research.

If you don't have treatment

- If you don't have any symptoms, you may never have any problems from your fibroids. ^[20]
- Your fibroids could stay the same size for at least a year. ^[21]
- If your fibroids are growing, waiting to treat them could make surgery harder on you and more difficult for your surgeon to do because they've got bigger. ^[22]
- Your fibroids are unlikely to stop you getting pregnant. ^[23] For more, see [Fibroids and getting pregnant](#) .
- If you're pregnant, your fibroids are unlikely to cause any problems. They'll probably stay the same size or even shrink during your pregnancy. ^[15] For more, see [Fibroids and pregnancy](#) .
- Your fibroids will probably shrink when you go through the **menopause** . ^[20]

If you have treatment

- Your fibroids are likely to grow back soon after you stop taking [hormone treatments](#) . ^[24]
- Fibroids may grow back after [surgery to remove them](#) (called a myomectomy), but usually don't. ^[25]
- You still have a good chance of getting pregnant after having surgery to remove fibroids. ^[23]

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- Most women who've had [surgery to remove their womb](#) (called a hysterectomy) say it made their life better because they didn't have symptoms any more.^[26] But this is a big operation and you can't get pregnant afterwards.

Questions to ask your doctor

If you have symptoms such as heavy periods, painful periods, or a feeling of fullness or discomfort in your pelvis, you may want to talk to your GP to find out if you have fibroids.

When you first see your GP

Here are some questions that you may want to ask about your symptoms when you first see your GP.

- Could fibroids be causing my symptoms?
- What else might be causing them?
- How can I find out if I have fibroids?

When you find out you have fibroids

If you've been told that you have fibroids, you may want to ask some of these questions.

- How do you know that I have fibroids?
- How long will my symptoms last?
- Will my fibroids go away on their own?
- Will they get bigger?
- Will they make it harder for me to get pregnant?
- What are the best treatments for me?
- Do the treatments cause side effects or other problems?
- Will I need surgery?
- Will my fibroids grow back after treatment?
- Will I be able to have a baby after treatment?

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If you're pregnant

If you don't have any symptoms, but find out you have fibroids during pregnancy, you may want to ask these questions.

- How many fibroids do I have?
- How big are they?
- Where are they in my womb?
- Are my fibroids a problem?
- What kind of problems might I get? Could my fibroids cause bleeding or pain?
- What will happen to my fibroids during pregnancy?
- Will the fibroids harm my baby?
- Will they make it hard for me to have a natural childbirth?
- Should I get treatment while I'm pregnant?
- What will happen after my baby is born?

Treatments:

Hormone treatments

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This information is for people who have fibroids. It tells you about hormone treatments for fibroids. It is based on the best and most up-to-date research.

Do they work?

Yes. If you take hormone treatments called gonadotrophin-releasing hormone analogues (GnRH analogues), there's a good chance your fibroids will shrink and symptoms such as heavy or painful periods will get better.

But taking a GnRH analogue on its own can cause more harm than good. You're likely to get side effects such as hot flushes (your face and upper body suddenly feel very hot) and thinning bones.

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Taking one of these drugs at the same time as hormone replacement therapy (HRT) with progestogen or a drug called tibolone can help reduce the side effects of hormone treatments. Taking a drug called raloxifene can also help prevent thinning of your bones.

Your fibroids are likely to grow back when you stop treatment.

You can also have [hormone treatments before surgery](#) .

What are they?

The main hormone treatment for fibroids is a type of drug called a GnRH analogue. GnRH stands for gonadotrophin-releasing hormone. GnRH analogues can't be taken as tablets, so you have injections or a spray up your nose. GnRH is a **hormone** that affects levels of other hormones in your body.

GnRH analogues act in the same way as this hormone. When you take GnRH analogues, your body makes less oestrogen. Oestrogen is the hormone that makes your fibroids grow. So, by reducing the supply of oestrogen, GnRH analogues can make your fibroids shrink.

Here are some examples of GnRH analogues (with brand names). There are several ways of taking them. We don't know whether how you take this treatment affects how well it works. ^[35]

- goserelin (Zoladex): this is an implant that's injected under your skin. You'll usually need to get one every month.
- leuprorelin (Prostap SR): this is an injection that goes into your muscle or under your skin. You'll usually need to get one every month.
- nafarelin (Synarel): this is a spray that you squirt up your nose twice a day.
- buserelin (Suprecur): this is a nasal spray or an injection.
- triptorelin (Decapetyl SR): this is an injection into your muscle. You'll probably need one every month.

You can take a GnRH analogue:

- By itself. But this can cause side effects such as hot flushes and thinning bones
- With other hormones to help reduce side effects. These are similar to HRT drugs used to treat symptoms of the **menopause** . Using progestogen is likely to reduce side effects such as hot flushes. Tibolone (brand name Livial) can also help side effects and prevent your bones getting thinner. A drug called raloxifene (Evista) can help prevent your bones getting thinner. We don't know whether taking a combination of oestrogen and progestogen can help. For more, see [Side effects of having hormone treatments](#) .

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When you stop taking GnRH analogues, your fibroids will probably grow back. So your doctor will usually offer this treatment only if you're getting close to the menopause or if you plan to have surgery for your fibroids. To read more, see [Hormone treatments before surgery](#).

How can they help?

If you take a GnRH analogue by itself or with HRT, it can shrink your fibroids and help your symptoms.

- Your fibroids may shrink by two-thirds of their size.^[39] It usually takes about three months of treatment to get them to shrink as much as they're going to. They're not likely to shrink any more after six months.^[35]
- Almost all women who take a GnRH analogue say their symptoms get better during treatment. After a few months, about half of all women say their periods have stopped altogether.^[39] This treatment may also help with symptoms such as pain and pressure during periods.
- If you take hormone treatment, you'll probably be given HRT as well.^{[35] [36] [37] [40]} The HRT gives your body back some of the hormones that the GnRH analogue lowers. This means you will have fewer side effects.

How do they work?

We're not sure exactly how hormone treatments work for women with fibroids.^{[44] [45]} Experts think these treatments make your fibroids shrink or go away by lowering the level of oestrogen in your body.

GnRH analogues stop your brain making two hormones: follicle-stimulating hormone (FSH) and luteinising hormone (LH). And that stops your **ovaries** making oestrogen.

Without oestrogen, your fibroids can't grow and they usually start to shrink. Symptoms such as heavy periods and pain should get better.^[46] It's similar to what happens naturally when you go through the menopause.

When you stop taking GnRH analogues, your body starts making oestrogen again. So your fibroids will probably grow back. They'll most likely return to their old size within six months after you stop treatment.^{[47] [24]}

Can they be harmful?

Yes. Most women get side effects from these drugs.^[39] Symptoms of the menopause and thinning bones are common side effects. Most of the women who took GnRH analogues in studies had side effects, but less than 1 in 10 stopped treatment early.^[24]

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Symptoms of the menopause

These include hot flushes, a dry or sore vagina, a change in the size of your breasts, sweats, nausea, aches and pains in your joints or muscles, and trouble sleeping. ^[39]

Between 4 in 10 and 10 in 10 women say they get hot flushes with this treatment. ^[39]

But you can reduce these symptoms by also taking HRT with progestogen or the drug tibolone. ^[35] ^[36] ^[37] ^[40] Only 1 in 10 women who took progestogen HRT said they had

hot flushes compared with 9 in 10 women who took a GnRH analogue on its own. ^[37]

And women who took tibolone were less likely to have hot flushes, a dry vagina, and sweats at night than women who took a GnRH analogue on its own. ^[35]

Thinning of your bones

This is the most serious side effect. Thinning bones can lead to **osteoporosis**, which makes your bones brittle and more likely to break. Your bones get 2 percent to 5 percent thinner during hormone treatment. Some studies say they recover after treatment, but others say they don't. ^[39] ^[38]

To prevent your bones getting too thin, you probably won't take this treatment for more than six months. Taking tibolone along with a GnRH analogue can stop your bones getting thinner. ^[40] Taking raloxifene can help prevent thinning of your bones, but it won't help your hot flushes. ^[48]

How good is the research on hormone treatments?

There's fairly good evidence that taking a hormone treatment called a gonadotrophin-releasing hormone analogue (GnRH analogue) helps the symptoms of fibroids.

But there's also lots of evidence that these drugs cause side effects.

Evidence for hormone treatments without HRT

We found a summary of the research (called a **systematic review**) on taking a GnRH analogue.

The review included three good studies (**randomised controlled trials**) that involved about 600 women who didn't take any extra hormones to reduce side effects. ^[39]

- About half the women who took GnRH analogues for three months found their periods stopped.
- But most women got side effects such as hot flushes and bone thinning.

Evidence for hormone treatments with HRT

There are good studies that show HRT can help prevent the side effects of GnRH analogues.

We found studies on four kinds of hormone replacement therapy:

- Progestogen HRT
- Tibolone
- Oestrogen and progestogen HRT
- Raloxifene.

The research shows that progestogen and tibolone can reduce side effects, including hot flushes.^{[35] [36] [37] [38] [40]} Tibolone and raloxifene can also prevent thinning bones.^{[35] [40] [42] [49]} But there's not enough evidence to show whether a combination of oestrogen and progestogen also works.^[50]

We need bigger studies to tell us which kind of HRT is best at reducing the side effects of GnRH analogues.

Surgery to remove your fibroids

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[How good is the research on surgery to remove your fibroids?](#)

This information is for people who have fibroids. It tells you about surgery to remove your fibroids. It is based on the best and most up-to-date research.

An operation to remove your fibroids is called a **myomectomy**.

Does it work?

Yes, probably. If you have [heavy periods](#) or painful periods, there's a good chance that this operation will help you get better. If you have keyhole surgery to remove your fibroids, you'll have less pain and recover faster than if you have open surgery. But keyhole surgery is only suitable if your fibroids are small.

We don't know if this operation works better than [surgery to remove your whole womb](#) (which is called a hysterectomy).

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What is it?

A myomectomy is an operation to take fibroids out of your womb. You can still have children afterwards.

Your surgeon can take out your fibroids in three different ways.

- With keyhole surgery. Your surgeon takes them out with special instruments put through tiny cuts in your abdomen. It's also called a **laparoscopic myomectomy**.
- Through your vagina. Your surgeon takes out your fibroids through your vagina with a tiny instrument called a hysteroscope. It is also called a **vaginal myomectomy**.
- With open surgery. Your surgeon takes out your fibroids through a cut in your abdomen. It's also called an **abdominal myomectomy**.

You should talk to your doctor about which type of surgery is best for you. In general, keyhole surgery is suitable only if your fibroids are small. ^[23] ^[51] Open surgery is best if you have big fibroids or lots of them, or if they are in certain places. ^[51] ^[26]

If you have either open or keyhole surgery, you'll need a **general anaesthetic** to make you sleep during the operation. If you have your fibroids removed through your vagina, you can have either a general anaesthetic or a **local anaesthetic**.

It will probably take one hour to two hours to remove your fibroids, depending on how many you have and how big they are.

How can it help?

Surgery to remove your fibroids will probably help your symptoms. ^[52]

One study showed that between 60 and 70 in 100 women had lighter periods after surgery to remove fibroids. And between 70 and 80 in 100 women had less pain. ^[53] Another study showed that 80 out of 100 women were satisfied with the outcome of the operation to remove fibroids. ^[54]

You'll have less pain from the operation after keyhole surgery than after open surgery, and you should get better faster. ^[23] ^[51] ^[55] ^[56] But keyhole surgery is only suitable if your fibroids are small.

- Most women who have keyhole surgery to remove their fibroids are back to normal in 15 days.
- But only 5 in 100 women who have open surgery are fully recovered by then.

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You can still have children afterwards.^[26] For women who are trying to get pregnant, about half get pregnant in the three years after this surgery.^[23] We don't know if having this surgery makes it more or less likely that you'll get pregnant.

However, your fibroids may grow back.

About 25 in 100 women get fibroids again in the three years after a myomectomy.^[57] If you have surgery for just one fibroid, you are less likely to have fibroids growing back than if you have surgery to remove many fibroids.^[58] It doesn't matter what type of surgery you have. Your chances of getting fibroids again are the same after all types of surgery.^{[23] [57]}

How does it work?

Removing fibroids from your womb will reduce the amount of tissue that bleeds during your period. So your periods should get lighter. Your pain should get better too.

Can it be harmful?

All surgery has risks.^{[23] [51]} The most common problems are bleeding during or after the operation, fever, and scar tissue.

- Bleeding during or after the operation: You're likely to bleed more if your fibroids are big and the operation takes a long time.^[51] If you lose a lot of blood, you may need [an operation to remove your womb](#) (a hysterectomy).
- Fever: Up to one-quarter of women get a fever soon after this operation.^{[23] [51]} You may need to take extra drugs called antibiotics if your fever is due to an infection.
- Scar tissue: Small bits of scar tissue (called adhesions) can form on your ovaries or fallopian tubes after the operation.^[28] Between 50 in 100 and 90 in 100 women get them. They can make it hard for you to get pregnant because they stop your ovaries and tubes working properly. But most of the time they're harmless.^[28]

Very rarely, keyhole surgery weakens the womb. This can cause problems in pregnancy or childbirth. It can be dangerous for the mother and baby.^[28]

How good is the research on surgery to remove your fibroids?

There's some evidence that surgery to remove your fibroids will help your symptoms. This operation is called a **myomectomy**.

The studies we found compared different types of surgery. They didn't compare women who had surgery with women who didn't. But the studies did show that women who had myomectomy were likely to say their symptoms improved afterwards.^[52]

One study found that about 1 in 4 women got fibroids again three years later, whatever operation they had. ^[59]

Surgery to remove your womb

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[How good is the research on surgery to remove your womb?](#)

This information is for people who have fibroids. It tells you about surgery to remove your womb (uterus), a treatment used for fibroids. It is based on the best and most up-to-date research.

Does it work?

Yes. An operation to take out your womb (a hysterectomy) also removes the fibroids in it. Your heavy or painful periods will stop straight away, and you should feel better.

But this is a big operation and you can't become pregnant afterwards. So it's usually an option only if:

- Your symptoms are bad
- Other treatments haven't helped
- You are sure you don't want to get pregnant in future.

If you have your womb removed through your vagina, your operation will probably be quicker than if you have your womb removed through a cut in your abdomen. You're also likely to get better faster if you have the operation through your vagina.

What is it?

A hysterectomy is an operation to remove your womb (uterus), along with any fibroids in it.

Having your womb removed is a big operation. You'll need to stay in hospital overnight, and often for much longer. You may not be able to work, do much at home, drive, or have a social life for up to six weeks after your operation.

There are three main ways you can have a hysterectomy.

- **Abdominal hysterectomy:** Your surgeon takes out your womb through a large cut in your abdomen.

Fibroids

- **Vaginal hysterectomy:** Your surgeon takes out your womb through your vagina without making any cuts in your abdomen.
- **Keyhole surgery:** Instruments are put through tiny cuts (between 1 centimetre and 2 centimetres long) in your abdomen. These instruments are called laparoscopes. They have a light and a tiny camera at the end and can also have cutting instruments attached to them. Your surgeon cuts away your womb (and fibroids) using these instruments. Your womb can then be removed in two ways. One option is to remove it partly through your vagina and partly through the tiny cuts in your abdomen. This procedure is called a **laparoscopically assisted vaginal hysterectomy**. The other option is to remove your womb just through the tiny cuts in your abdomen. This procedure is called a **total laparoscopic hysterectomy**.

To learn more, see [What happens during surgery to remove your womb?](#)

The National Institute for Health and Care Excellence, which advises the government on healthcare, says keyhole (laparoscopic) hysterectomy is safe enough and works well enough to be used in the NHS. But it says: ^[60]

- Women should be told that keyhole hysterectomy can increase the chances of having serious bleeding, or damage to the bladder
- Doctors carrying this out should have special training in keyhole surgery.

How can it help?

If you have a hysterectomy, you won't have periods again. So, you won't have any symptoms related to your periods. ^[26] Your fibroids won't ever grow back.

Most women who have a hysterectomy say they're satisfied with the operation. They also say that it made them feel better. ^[26]

But you may have a different experience depending on how you have your womb removed. Surgery through your vagina (a vaginal hysterectomy) may be better than surgery through a large cut in your abdomen (an abdominal hysterectomy). ^{[63] [64] [65]} If you have your womb removed through your vagina rather than through a large cut in your abdomen, you're likely to: ^{[63] [64]}

- Have a shorter operation
- Lose less blood
- Have less pain
- Have a reduced risk of fever

Fibroids

- Recover from your operation more quickly
- Feel more satisfied about your operation.

You may be able to have your womb removed through your vagina even if your womb is big because you have lots of fibroids. ^[63] ^[64]

There are also advantages to having a hysterectomy done with a special instrument, known as a laparoscope (operations that use a laparoscope are often called keyhole surgeries). ^[66] If you have a total laparoscopic hysterectomy instead of ordinary surgery through your abdomen, you're likely to: ^[66]

- Have a shorter stay in hospital
- Have a reduced risk of fever after the operation
- Recover faster.

In one study, women who had a vaginal hysterectomy done partly with the help of keyhole surgery (a laparoscopically assisted vaginal hysterectomy) also had less pain and a faster recovery than women who had an abdominal hysterectomy. ^[62] But they lost more blood and their operation took longer.

How does it work?

Fibroids grow in your womb. Because a hysterectomy takes out your womb, it also takes out your fibroids. So the symptoms they're causing should go away.

Can it be harmful?

Yes. A hysterectomy is a big operation, so there are risks. About 1 in 5 women who have a hysterectomy have problems afterwards. ^[67] Most of these are mild and clear up with time.

You could get one of these mild problems:

- **Fever** ^[62]
- **Pain.** ^[62] It's usually mild and can be treated with painkillers
- A mild **infection** in your wound or your **bladder**. You may need to take **antibiotics**
- Feeling depressed straight after your operation.

You can also get these serious problems, but they're less likely:

Fibroids

- Blood clots in your legs or lungs
- A bad infection in your wound
- Bleeding during surgery or afterwards
- Blockage of your intestine from bits of tissue called adhesions
- Damage to your bladder or to the tubes that carry urine from your kidneys to your bladder (your ureters)
- Damage to your bowel.

You can't become pregnant after a hysterectomy, and there's no way to reverse it. So you might want to try other treatments for your fibroids first.

How good is the research on surgery to remove your womb?

We know that removing your womb will get rid of fibroids that are causing your symptoms. This kind of operation is called a hysterectomy.

But this is a treatment of last resort and should only be considered if you don't want to get pregnant. There's fairly good evidence that if you have surgery through your vagina your operation will be shorter and you'll recover more quickly than if you have your womb removed through your abdomen.

We found six studies that compared different hysterectomy operations for women with fibroids. ^[62] ^[63] ^[64] ^[65] ^[66] These are:

- **Abdominal hysterectomy** (surgery done through a cut in your abdomen)
- **Vaginal hysterectomy** (surgery done through your vagina)
- **Laparoscopically assisted vaginal hysterectomy** (surgery done through your vagina, partly with help from special instruments put through tiny cuts in your abdomen)
- **Total laparoscopic hysterectomy** (surgery totally done with special instruments put through tiny cuts in your abdomen).

To learn more, see [What happens during surgery to remove your womb?](#)

Overall, the studies found that:

- Women who had a vaginal hysterectomy had shorter operations, lost less blood, had less pain and fever, got better faster, and were more satisfied with their operation than women who had an abdominal hysterectomy ^[63] ^[64] ^[65]

Fibroids

- Women who had a vaginal hysterectomy done with the help of a laparoscope had less pain and recovered faster than women who had an abdominal hysterectomy. But they lost more blood and their operation took longer ^[62] ^[63]
- Women who had an ordinary abdominal hysterectomy spent longer in hospital, were more likely to get a fever, and took longer to get better than women having a hysterectomy done totally with a laparoscope. ^[66]

Hormone treatments before surgery

In this section

[Do they work?](#)

[What are they?](#)

[How can they help?](#)

[How do they work?](#)

[Can they be harmful?](#)

[How good is the research on hormone treatments before surgery?](#)

This information is for people who have fibroids. It tells you about having hormone treatment before surgery to remove your fibroids. It is based on the best and most up-to-date research.

Do they work?

Probably. If you're planning to have [surgery to remove your fibroids](#) (a myomectomy) or [surgery to remove your womb](#) (a hysterectomy), taking hormone treatments first is likely to make surgery easier and help you recover faster.

But hormone treatments may make your fibroids more likely to grow back after a myomectomy.

What are they?

You take a drug called a GnRH analogue. GnRH is short for gonadotrophin-releasing hormone. It's a **hormone** that affects levels of other hormones in your body.

GnRH analogues are drugs that work in the same way as this hormone. When you take them, your body makes less oestrogen. Oestrogen is the hormone that makes your fibroids grow. So, by reducing the supply of oestrogen, GnRH analogues can make fibroids shrink.

Here are some examples of GnRH analogues (with brand names). You take them in different ways. We don't know whether how you take this treatment affects how well it works. ^[68] ^[69]

- goserelin (Zoladex): This is an implant that's injected under your skin. You'll probably need to get one every month.

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- leuprorelin (Prostap SR): This is an injection that goes into your muscle or under your skin. You'll probably need to get one every month.
- nafarelin (Synarel): This is a spray that you squirt up your nose twice a day.
- buserelin (Suprecur): This is a nasal spray or an injection.
- triptorelin (Decapeptyl SR): This is an injection into your muscle. You probably need one every month.

If you're taking hormone treatment before a myomectomy or a hysterectomy, you'll probably take it for two months to four months before the operation. ^[68]

How can they help?

Before surgery to remove your fibroids

If you take a GnRH analogue for two to four months before surgery to remove your fibroids (a myomectomy): ^[68]

- Your symptoms should improve before surgery
- You're less likely to get **anaemia** before surgery. Heavy periods can make you anaemic, and that can make you tired. Hormone treatment makes your periods lighter or makes them stop
- It should be easier for your surgeon to remove your fibroids because they're smaller.

Before surgery to remove your womb

If you take a GnRH analogue for two months to four months before a hysterectomy:

- Your surgeon is more likely to be able to take out your womb through your vagina instead of through your abdomen. ^[68] An operation through your vagina is easier. So you're likely to lose less blood, recover faster, and go home from hospital sooner ^[68]
- If you have your womb taken out through your abdomen, your surgeon is more likely to be able to use a horizontal cut (one running across your abdomen) rather than a vertical cut (one running up and down). ^[68] Horizontal cuts heal faster than vertical cuts.

How do they work?

We're not sure exactly how hormone treatments work for women with fibroids.^[44] ^[45] Experts think that these treatments may make your fibroids shrink or go away by lowering the level of oestrogen in your body.

GnRH analogues stop your brain making two hormones: follicle-stimulating hormone (FSH) and luteinising hormone (LH). And that stops your **ovaries** making oestrogen.

Without oestrogen, your fibroids can't grow and they usually start to shrink. Symptoms such as heavy periods and pain should get better.^[68] It's similar to what happens naturally when you go through the menopause.

Can they be harmful?

Yes. Most women get side effects during hormone treatment with GnRH analogues, but only after taking them for about three months.^[68] ^[39] If you're taking hormone treatment before surgery, you'll take it for only two months to four months. So, you shouldn't get many serious side effects.

The main side effects are like those of the menopause. You may get:

- Hot flushes (your face and upper body suddenly feel very hot)
- A dry or sore vagina
- A change in the size of your breasts.

These side effects go away when you stop taking the drug.

If you're planning to have an operation to remove just your fibroids (a **myomectomy**), taking hormone treatment before surgery may make your fibroids more likely to grow back after surgery.^[68] It's hard to say how much more likely, because different studies say different things.^[68] ^[69]

How good is the research on hormone treatments before surgery?

There's good evidence that hormone treatments shrink fibroids before [surgery to remove them](#) (a myomectomy) or [surgery to remove the womb](#) (a hysterectomy). They will probably make the surgery easier.

We found one summary (called a **systematic review**) of 21 high-quality studies.^[46] It looked at nearly 2,000 women in total. Women who took a hormone treatment called a GnRH analogue for at least three months before surgery had improved symptoms before their operation. Surgery was also easier and recovery quicker among women who had hormone treatment.

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The review also found that women lost slightly less blood during surgery if they took a GnRH analogue before their operation. But another study of 100 women found that taking a GnRH analogue before a myomectomy didn't make much difference in how much blood women lost. ^[69]

Surgery to remove the lining of your womb

In this section

[Does it work?](#)

[What is it?](#)

[How can it help?](#)

[How does it work?](#)

[Can it be harmful?](#)

[How good is the research on surgery to remove the lining of your womb?](#)

This information is for people who have fibroids. It tells you about surgery to remove the lining of your womb (uterus), a treatment used for fibroids. It is based on the best and most up-to-date research.

Does it work?

We're not sure. Destroying the womb lining can make your periods lighter. But there's not enough research to say if removing the lining of your womb helps if you have fibroids.

So far, only two kinds of operation to destroy the womb lining (called thermal balloon endometrial ablation and rollerball endometrial ablation) have been tested in women with small fibroids.

We need more research in many women, including those with larger fibroids, to know if an operation to remove your womb lining can help symptoms caused by fibroids.

What is it?

The lining of your womb (uterus) is known as the endometrium. There are lots of different ways of removing the womb lining.

- It can be cut away in small pieces (in an operation known as **endometrial resection**) using a special instrument, such as a heated wire loop.
- Or your womb lining can be destroyed (in an operation known as **endometrial ablation**) using heat in a variety of ways.

Newer techniques include using heat from microwaves, electrical currents, or a heated rollerball (called rollerball ablation). But not all techniques are suitable for women with heavy bleeding caused by fibroids.

We've prepared some extra information for people thinking of having these operations. To read more, see Endometrial ablation (diathermy) and Endometrial ablation (microwave).

Fibroids

Thermal balloon endometrial ablation is a simple treatment that has been tested in women with small fibroids. A surgeon uses a balloon filled with hot water to heat up the lining of your womb and destroy it. You can stay awake during this treatment, and it takes only about 15 minutes to 30 minutes. ^[70]

Here's what you can expect:

- You may be given a **sedative** or painkiller first
- Your doctor gives injections of **local anaesthetic** in and around the neck of your womb (your **cervix**) so the treatment won't hurt
- Your doctor then puts a tube with a balloon on the end into your womb
- Your doctor fills the balloon with water, which is then heated up
- The water-filled balloon is left in your womb for about eight minutes
- Your doctor then lets the water out and takes out the tube and balloon
- You can go home the same day.

If you are having rollerball endometrial ablation a heated rollerball is used to destroy your womb lining rather than a balloon filled with water. The procedure takes about 40 minutes with a rollerball and about 12 minutes with a heated balloon. ^[70]

How can it help?

If you have your womb lining destroyed using a heated balloon (called thermal balloon endometrial ablation) or a heated rollerball (called rollerball endometrial ablation): ^[70]

- Your periods should get lighter (they may even stop completely)
- You'll lose less blood during your periods
- If you have **anaemia** because of heavy periods, that will get better and you should feel less tired.

But it may not work well for all women with fibroids. In one study, 1 in 3 women said they were not very satisfied with the results (whether they had their womb lining removed with a rollerball or with a heated balloon). ^[70]

We don't know how this treatment affects other symptoms of fibroids, such as pain in your **pelvis** , painful periods, or feelings of pressure. And there is a risk that you might need to have your whole womb removed during this procedure. ^[70]

How does it work?

The lining of your womb is the part that gets thicker each month. If you don't get pregnant, it pulls away and flows out of your body during your period. Removing your womb lining will take away most, if not all, of the tissue that bleeds each month. Even if some of the lining is left behind your periods should be lighter after the operation.

Can it be harmful?

We don't know much about the side effects of this treatment for women with fibroids. In one study, 3 out of 45 women who had thermal balloon ablation had problems afterwards. ^[70]

- Two women had mild infections in their womb. They took antibiotics and got better.
- One woman got a blockage in her cervix so that blood from her period got stuck in her womb. She needed another operation to fix the problem.
- It's can be harder to get pregnant after your womb lining has been taken out, but it is still possible. You should use your normal contraception unless you've had an X-ray to confirm that you're no longer able to have a baby.
- Some women find that their periods stop altogether after this operation.

How good is the research on surgery to remove the lining of your womb?

There's very little evidence on how surgery to remove the womb lining can help you if you have fibroids. We found just one good study (called a randomised controlled trial) that looked at the effects of removing the womb lining in women with fibroids. ^[70] The study included 96 women. It compared two ways of destroying the womb lining:

- Using a hot balloon (thermal balloon endometrial ablation)
- Using a hot rollerball.

The two treatments were equally good at making women's periods lighter and increasing the amount of iron in their blood.

Nonsteroidal anti-inflammatory drugs (NSAIDs)

In this section

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[Can they be harmful?](#)

[How good is the research on nonsteroidal anti-inflammatory drugs \(NSAIDs\)?](#)

Fibroids

This information is for people who have fibroids. It tells you about nonsteroidal anti-inflammatory drugs (NSAIDs), a treatment used for fibroids. It is based on the best and most up-to-date research.

Do they work?

We're not sure. We need more research to say if nonsteroidal anti-inflammatory drugs (NSAIDs) help women with fibroids.

What are they?

NSAIDs are painkillers. They also reduce inflammation. There are several different kinds. You can buy some, such as ibuprofen, from a pharmacy. Others you can only get on prescription.

Here are examples of NSAIDs (with some brand names). They come as tablets or capsules.

- ibuprofen (Nurofen, Cuprofen). This is one of the most common NSAIDs. Doctors usually prescribe it by the drug name ibuprofen rather than a brand name. You can buy it at a lower dose over the counter, also as ibuprofen.
- ketoprofen (Orudis).
- naproxen (Naprosyn).

How can they help?

We don't know if NSAIDs help women with fibroids. There's not enough good research in women with fibroids to say.

How do they work?

In women with some kinds of heavy periods, NSAIDs reduce bleeding by up to one-third.^[71] So, doctors thought they might work for women with heavy periods due to fibroids. But so far there hasn't been any good research looking at this.

If you have heavy periods, you may have an imbalance of chemicals called **prostaglandins**. These chemicals control how much you bleed during your period. NSAIDs change how your body makes prostaglandins. That should, in theory, lighten your heavy periods.

Fibroids are one of the most common causes of heavy periods. But we still don't know why they cause heavy periods. So we can't be certain that NSAIDs will help.^[72]

Can they be harmful?

Yes. All NSAIDs can cause side effects, and people with heart problems should not take an NSAID called diclofenac.^[73] In one study, about one-quarter of the women taking the NSAID ibuprofen said they had headaches, dizziness, diarrhoea, and nausea.^[72] But the side effects were mild, and none of the women stopped taking their treatment because of them.

If you take NSAIDs regularly, they can upset your stomach and cause other stomach problems, such as ulcers. This is especially likely if you're older or if you're taking high doses. About 1 in 10 people have these side effects.

Tell your doctor if you have a stomach ulcer. About 2 in 10 to 3 in 10 people who have one get more stomach problems when they take NSAIDs.

Some NSAIDs can increase the risk of having a heart attack or a stroke. But the risk is small, and linked to taking the drugs at high doses for a long time. For more information, see [Warnings about side effects of NSAIDs](#).

How good is the research on nonsteroidal anti-inflammatory drugs (NSAIDs)?

There is no good evidence that nonsteroidal anti-inflammatory drugs (NSAIDs) help women with fibroids. More research is needed in this group of women.

Having a coil (Mirena) fitted

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[How good is the research on having a coil \(Mirena\) fitted?](#)

This information is for people who have fibroids. It tells you about having a coil (Mirena) fitted, a treatment used for fibroids. It is based on the best and most up-to-date research.

Does it work?

We don't know. Having this type of coil fitted may make heavy periods lighter for some women. But we don't know if having a coil fitted will help to shrink fibroids.^[81]

If you don't want to get pregnant, this might be a good treatment to try because it acts as a contraceptive.

What is it?

It's a type of coil you can have fitted that releases the hormone progestogen into the womb. The brand name is Mirena and it is also a contraceptive. You may have heard this called an IUD (intrauterine device) or an IUCD (intrauterine contraceptive device).

Fibroids

It's also called the IUS (intrauterine system). Doctors also prescribe it for [heavy periods](#).

An IUD is a T-shaped plastic frame about half the length of your thumb. It contains progestogen in a form called levonorgestrel, which is released in a set amount each day.

You should only have a coil fitted by a doctor or nurse who has been specially trained. He or she will slide the coil through your vagina into your womb. The arms of the 'T' fold downwards and, when it's in place, open up again.

Being fitted with a coil can be uncomfortable, so you may have a painkiller (a [local anaesthetic](#)) that numbs that area.

How can it help?

We don't know if this type of coil helps to shrink fibroids. There haven't been many studies. Having a coil fitted can make heavy periods lighter. ^[81]

How does it work?

By releasing progestogen into your womb, this type of coil stops the lining of your womb (the endometrium) getting thicker every month. So there's less lining to come away during your periods, and you should bleed less. ^[82]

But we're not sure yet if it works for women who have heavy periods because of fibroids. Experts think that fibroids might dislodge the coil, so that it falls out or doesn't work properly. We need more research. ^[83]

Can it be harmful?

This type of coil may cause side effects like those of progestogen pills taken for contraception (also called the mini-pill).

But the side effects from the device should be much milder. This is because the dose of progestogen getting into your bloodstream with the device is very small, compared with the dose you'd get with the mini-pill.

Side effects of the device include: ^[68]

- Bloating
- Weight gain
- Breast soreness
- Irregular periods, but not heavy periods. (With irregular periods, the number of days between your periods varies a lot.)

Fibroids

Rarely, an IUD can move and come out. If this happens, you may have bleeding, pain, or no symptoms at all. You may notice that your heavy periods have come back. ^[84] If you suspect there's a problem with your device, see your doctor.

There have been some reports that the Mirena IUD can cause the womb to tear. ^[85] ^[86] This is very rare, but it can be serious. Remember that you should only have a coil fitted by a doctor or nurse who has been specially trained.

How good is the research on having a coil (Mirena) fitted?

There isn't much good evidence. One summary of studies looked at whether having this type of coil helps women with fibroids. But the summary only looked at three studies. Only one of the three studies had reliable results, but this study only included 29 women. We need more studies to know whether having a coil fitted helps women with fibroids. ^[81]

Getting rid of fibroids with ultrasound

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[Can it be harmful?](#)

[How good is the research on getting rid of fibroids with ultrasound?](#)

This information is for people who have fibroids. It tells you about getting rid of fibroids with ultrasound. It is based on the best and most up-to-date research.

Does it work?

We're not sure. There hasn't been any good research on whether this treatment helps women with fibroids.

What is it?

High-energy sound waves can be used to destroy fibroids. This treatment isn't widely available yet in the UK. But it may provide an option for women who don't want to have surgery for their fibroids.

The treatment is done with a device called ExAblate 2000, which was approved in the US by the Food and Drug Administration (FDA) in October 2004. It uses focused sound waves from an ultrasound machine to destroy fibroids. (This is different from the **ultrasound** that's used to make images of the inside of your body.)

The treatment takes up to three hours and doesn't involve surgery. You can go home the same day. Here's what you can expect. ^[87] ^[88]

- You take a medicine to make you relax, but you stay awake during the treatment.

Fibroids

- You lie in an MRI scanner during the entire process. This machine creates detailed pictures of the inside of your womb. These pictures let your doctor see your fibroids as three-dimensional images.
- These images appear on a screen in front of your doctor. He or she uses them to focus the sound waves at each fibroid. The sound waves pass through your lower belly and into the fibroid.
- The sound waves heat up a section of the fibroid about the size of a peanut. This kills the cells in the tissue.
- The doctor focuses the sound waves on different parts of the fibroid for about two minutes at a time. The goal is to destroy enough of the fibroid to stop it causing problems.
- The MRI scanner lets the doctor check the temperature within the fibroid to find out when each spot is hot enough.

How can it help?

We don't know if it can help. One summary of the research found some studies looking at this treatment, but they were not very good quality. The summary said there isn't enough evidence to say how well it works, or how safe it is. ^[89]

The National Institute for Health and Care Excellence (NICE), the body that says which treatments should be available in the NHS, says this treatment should only be used if a surgeon has explained to the woman that the benefits and risks of it are not certain. To find out more about what NICE says, follow this link to the NICE guidelines on ultrasound removal of fibroids. ^[90]

How does it work?

Doctors think that destroying fibroids that are causing symptoms will reduce your pain and discomfort. Your periods should also get lighter.

Can it be harmful?

Possible side effects include: ^[88]

- Fainting during or after the treatment
- Pain or cramping in the lower belly
- Queasiness
- Fever

Fibroids

- Allergic reactions to medicines
- Minor burns on the skin
- Back or leg pain
- An infection in the urinary tract .

These side effects usually clear up within two weeks of treatment. But longer-term side effects can also happen. These include: ^[88]

- Severe burns on the skin
- Back or leg pain, or weakness from nerve damage.

Women who might want to get pregnant shouldn't use this treatment. ^[87] Researchers don't know yet whether it could weaken the womb and affect a woman's chances of getting pregnant and having a baby. This treatment also shouldn't be used for fibroids that are close to organs such as the bowel or bladder. ^[87]

The US Food and Drugs Administration (FDA) has asked the manufacturer to do a three-year study to look more closely at whether the treatment is safe and whether it works over a longer period of time.

How good is the research on getting rid of fibroids with ultrasound?

There is no good research to say whether this treatment helps or not.

Getting rid of fibroids with a laser

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[How good is the research on getting rid of fibroids with a laser?](#)

This information is for people who have fibroids. It tells you about getting rid of fibroids with laser treatment. It is based on the best and most up-to-date research.

Does it work?

We're not sure. There hasn't been enough good research on this treatment in women with fibroids to say how well it works.

Fibroids

What is it?

Getting rid of fibroids with a laser is a new type of procedure. It is not yet widely available in the UK. As the name suggests, this treatment uses a laser to destroy fibroids.

The treatment can be done as a day case (you won't have to stay in hospital overnight) and doesn't involve surgery. You can go home the same day. Here's what you can expect.

[91]

- You take a medicine to make you relax, but you stay awake during the treatment.
- You are given a **local anaesthetic** to numb the skin of your abdomen above where your fibroids are.
- You lie in an **MRI scanner** during the entire process. This machine creates detailed pictures of the inside of your womb. These pictures let your doctor see your fibroids as three-dimensional images.
- These images appear on a screen in front of your doctor. Your doctor uses them to insert needles through the skin and into the fibroids.
- Laser fibres are then threaded down each needle into the fibroid.
- Laser energy is passed down the laser. This heats the fibroid and destroys it.
- The MRI scanner lets the doctor check the temperature within the fibroid so he or she knows when each spot is hot enough.

The National Institute for Health and Care Excellence (NICE), the body that says which treatments should be available in the NHS, has said laser treatment should be available for getting rid of fibroids. But it also says that: [91]

- Women need to understand that doctors still don't know how safe this procedure is and how well it works. They should only agree to have this treatment after they have had a discussion about this with a health professional
- Details will be collected about women who have this treatment in England and Wales. This information will only be used for research to find out how safe and effective uterine embolisation really is. You will be asked to sign a consent form permitting your details to be used. But if you don't agree, you'll still be allowed to have the treatment.

How can it help?

We're not sure it can. There isn't enough good research to say how laser treatment can help women with fibroids.

How does it work?

Doctors think that destroying fibroids that are causing symptoms may reduce your pain and discomfort. Your periods should also get lighter.

Can it be harmful?

Laser treatment may cause the following problems:^[91]

- Infections in the urinary tract (the bladder and the tubes that carry urine to the outside)
- Minor burns to the skin
- Bleeding from the vagina .

But these problems are likely to be minor.

How good is the research on getting rid of fibroids with a laser?

There's no good evidence that getting rid of fibroids with a laser is helpful. More research is needed.

Uterine embolisation

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[How good is the research on uterine embolisation?](#)

This information is for people who have fibroids. It tells you about uterine embolisation, a treatment used for fibroids.

Does it work?

Yes, uterine embolisation is likely to help with fibroids symptoms.

What is it?

Uterine embolisation (also called uterine artery embolisation) works by cutting off the blood flow to your fibroids. The procedure usually takes about an hour. Here's what you can expect.^[92]

- You'll be given a local anaesthetic in the area where the surgeon is going to operate.
- Your surgeon will make a small cut, usually about half a centimetre long, in your groin (where your leg joins to your hip).

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- A thin tube will be put in a blood vessel there and pushed up into the main blood vessel in your womb (the uterine artery). The surgeon will use an **X-ray** to guide the tube into place.
- The surgeon will then inject tiny plastic beads (about the size of grains of sand) into the blood vessel. This blocks it off.
- You'll probably stay in hospital overnight.
- You may have some pain in your abdomen for a few weeks afterwards.

The National Institute for Health and Care Excellence (NICE), the government body that decides which treatments should be available on the NHS, says that: ^[93]

- You should only have uterine embolisation after talking to your doctor about the risks
- Two doctors have to agree that this treatment is right for you. The doctors should be a consultant gynaecologist (a doctor with specialist knowledge of the womb) and a consultant interventional radiologist (a doctor with specialist training in using techniques such as X-rays to guide narrow tubes through your blood vessels)
- Details will be collected about women who have this treatment in England and Wales. This information will only be used for research to find out how safe and effective uterine embolisation really is. You will be asked to sign a consent form permitting your details to be used. But if you don't agree, you'll still be allowed to have the treatment.

How can it help?

If you have uterine embolisation ^[94]:

- You may be able to leave hospital sooner than if you have an [operation to remove your womb](#) (a hysterectomy). On average, people stay only one or two days instead of five or six days. ^{[95] [96] [97]}
- You are less likely to have heavy bleeding or need a blood transfusion if you have uterine embolisation instead of a hysterectomy.
- You may be able to get back to your usual activities faster than if you have a hysterectomy. On average, it may take only nine or ten days to get back to normal, instead of about a month. ^[95]

In studies, the operation improved symptoms in between 6 and 9 out of 10 women in the first six months after treatment. But not enough is known about whether the benefits last or whether the procedure can affect your ability to have children. ^[93]

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Some studies show that women are more satisfied, and have less heavy bleeding or pain from their fibroids, after having a hysterectomy.^[97] ^[98] In one study, 9 in 100 women decided to have a hysterectomy, during the year after having uterine embolisation.^[97]

You need to weigh up the benefits of a faster recovery with uterine embolisation, against the benefits of more relief from your symptoms with hysterectomy.

Can it be harmful?

Your chance of getting problems after uterine embolisation is the same as if you had an operation to remove your womb (a hysterectomy).^[95] About 1 in 20 women have to go back into hospital whatever operation they have.

Uterine embolisation sometimes causes the following problems:^[93] ^[29] ^[99]

- An infection
- Nausea and sickness
- Damage to or blockage of the bowel
- Heavy bruising
- Allergic reactions
- A fibroid detaching from the womb and passing out of the vagina
- The need for a hysterectomy
- Problems with a pregnancy
- Ovaries that stop working and an early menopause.

Uterine embolisation seems to affect future pregnancies. In one study, it decreased the chances of getting pregnant and increased the risk of having a miscarriage, when compared to people who had an operation to remove fibroids (a myomectomy).^[100]

Very rarely, people who have this operation die.

How good is the research on uterine embolisation?

There's good evidence comparing uterine embolisation with hysterectomy or myomectomy for getting rid of fibroids. We found a summary of the evidence (a systematic review) which included three studies.^[94] Most of the research agreed that uterine embolisation causes less problems in the short term, but that longer-term results were better after hysterectomy.

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We didn't find research looking at how uterine embolisation compared to non-surgical treatments, such as medicines.

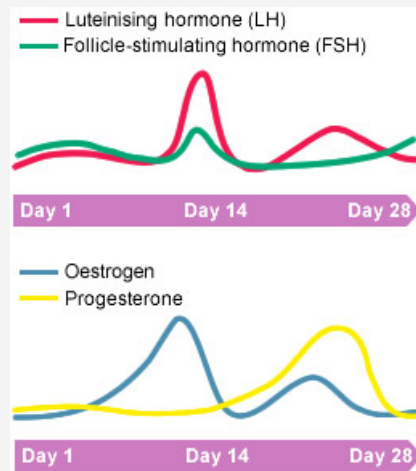
Further informations:

What happens every month

Your menstrual cycle usually lasts about 28 days. But it can be as short as 20 days or as long as 36 days.

It's controlled by certain hormones and it has three stages. ^[6]

Early cycle



These graphs show how the levels of different hormones change during your monthly cycle.

- Your cycle begins on the first day of your period. Your levels of hormones are low at this time.
- In the first few days, part of your brain starts making a hormone called gonadotrophin-releasing hormone (or GnRH for short).
- GnRH stimulates another part of your brain to make two more hormones. They're called luteinising hormone (LH) and follicle-stimulating hormone (FSH).
- They travel in your bloodstream to your ovaries. Here, the hormones cause some eggs to start growing.
- The growing eggs make the hormone oestrogen.
- Oestrogen makes the lining of your womb (the endometrium) start to get thicker.

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- One egg grows faster than the others. The rest shrivel up.

Mid cycle

- In the middle of your menstrual cycle, your levels of luteinising hormone (LH) rise sharply.
- This helps the growing egg come out of your ovary. This is called ovulation.
- The egg travels into one of your fallopian tubes . Once inside, the tube's tiny hairs push the egg along, towards your womb.

Late cycle

- Your body gets ready for pregnancy.
- Your ovaries keep making oestrogen and make lots of progesterone.
- Progesterone makes the lining of your womb (the endometrium) even thicker, so it's ready for a fertilised egg.
- If a fertilised egg arrives, it may stick to your womb lining and start to grow. This is how pregnancy starts.

Two things can happen:

- You get pregnant. Your hormone levels stay high to keep your pregnancy going
- You don't get pregnant. Your hormone levels start to drop. Without hormones, the lining of your womb breaks down, pulls away, and flows out of your vagina. This is when you have your period. And your menstrual cycle starts all over again.

How can I tell if my periods are heavy?

You can have heavy periods whether your periods are a normal length (one day to seven days) or longer than normal (more than seven days). You may be unsure what counts as 'normal' and what counts as 'heavy' bleeding. But if your periods affect your ability to get on with daily life, you can talk to your doctor about whether to have treatment.

These are some of the things your doctor may ask:

- Do you need to change a super-absorbency tampon or pad at least once an hour?
- Do your periods last longer than seven days?

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- Do you have to get up at night to change your tampon or pad?
- Do you bleed onto your sheets while you're asleep, even though you're wearing a tampon or pad?
- Do you have 'floods'? (This is when you suddenly pass a lot of blood that soaks your underwear and maybe your clothes.)
- Do you pass blood clots?
- Do you stay at home during your periods because you're afraid you won't get to a toilet in time to change your tampon or pad when you're out?
- Does the heaviness of your periods affect your work, social life, or family life?

If you answer yes to any of these questions, your periods may be heavier than normal.

Fibroids and getting pregnant

You may worry that fibroids will affect your ability to have children. But fibroids cause this problem for only a small number of women.

Here are the answers to some questions you may have about your fibroids and getting pregnant.

Will fibroids stop me getting pregnant?

Probably not. There's not enough research to say if women with fibroids are less likely to get pregnant than women who don't have them. But most women who have fibroids have no trouble getting pregnant.

Why could fibroids make it harder for me to get pregnant?

We don't know why fibroids might make it harder for you to get pregnant. But if your fibroids are growing in the muscle layer or under the lining of your womb, they could make it hard for a fertilised egg to stick to the lining and start growing.^[27]

Will treatment for fibroids increase my chances of getting pregnant?

We're not sure. Here's what we know from the research.

- Almost half the women who have been trying for a baby get pregnant after having [surgery to remove their fibroids](#) (a myomectomy).^[23] But we don't know how many would have got pregnant without surgery.^[27]

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- A myomectomy can cause bits of tissue to grow between the organs in your pelvis. Doctors call these **adhesions**. If they grow on your ovaries, fallopian tubes, or womb, they can make it hard for you to get pregnant.^[28]
- A treatment called **uterine embolisation** may not be safe if you want to have a baby because it can cause problems with your pregnancy.^{[29] [30]} For more, see [Uterine embolisation](#).

Fibroids and pregnancy

In most women (4 out of 5), fibroids stay the same size or shrink during pregnancy.^[15]

Many women don't know they have fibroids until they get pregnant and have their first ultrasound scan.^[31] This is happening more and more because women are having children in their 30s, when fibroids are especially likely to grow.^[31]

If you've been told you have fibroids, you may worry that they'll harm your baby and make your pregnancy or birth difficult. But most women with fibroids have a normal pregnancy and delivery.^[31]

Problems can happen, but they're rare and not likely to happen to you. Here are some of the problems that can happen.^{[15] [31] [32]}

- Giving birth too early (premature birth).
- The baby may face the wrong way in the womb.
- Pain when fibroids shrink, especially later on in pregnancy, if the fibroids are large.
- Bleeding from the placenta.
- Problems urinating, if a fibroid presses on the tube that takes urine out of the body (the urethra).
- A miscarriage. We don't know exactly how likely this is, because there hasn't been much research. Studies show that 20 in 100 women with fibroids in the womb wall had a miscarriage, compared with 13 in 100 women without fibroids.^[32]
- Needing to have a caesarean section. If your fibroids are large (more than 5 centimetres across) you may need a caesarean.^[33]

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You can have your fibroids removed during pregnancy. But doctors don't recommend it because you could have bad bleeding. ^[31]

Instead, you can be carefully watched by an obstetrician (a doctor who specialises in treating pregnant women) who is familiar with fibroids. ^[31]

If you've had several miscarriages, your doctors may check to see if you have fibroids that could be causing problems with your pregnancy.

Side effects of having hormone treatments

Hormone treatment with gonadotrophin-releasing hormone analogues (GnRH analogues for short) causes side effects that are like the symptoms of the menopause. These include hot flushes (your face and upper body suddenly feel very hot), sleep problems, and a dry or sore vagina.

Your doctor may suggest you take other hormones to help these side effects. This is called hormone replacement therapy (HRT) because it gives your body back some of the hormones that the GnRH analogue lowers.

You take some of the same kinds of drugs used for HRT to treat symptoms of the menopause. Pills of progestogen, or oestrogen and progestogen, are used in HRT.

Two other drugs, tibolone and raloxifene, may also prevent thinning bones that can lead to osteoporosis.

When used on their own (to treat symptoms of the menopause for example), some types of HRT can cause fibroids to grow back. But this doesn't happen if you take HRT with a GnRH analogue to treat your fibroids.

Some types of HRT can cause side effects. To learn more, see our information about [HRT](#) in our section on the menopause.

Progestogen

Progestogen pills contain a man-made (synthetic) version of the natural hormone progesterone. Some common brands are Utovlan, Primolut, and Gestone.

Progestogen HRT can:

- Reduce your hot flushes ^[36] ^[37]
- Make your periods lighter if you're still having them (many women stop having them during treatment with a GnRH analogue). ^[38]

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But it probably can't stop your bones thinning.^[39] In one small study, women's bones thinned by about 3 percent during six months of treatment with a GnRH analogue.^[39] There's no evidence that taking hormone replacement therapy with progestogen or with oestrogen and progestogen stops this.

Oestrogen and progestogen

Oestrogen and progestogen HRT (called combined HRT) aims to give you back some of the hormones that are reduced by the menopause or treatment with a GnRH analogue. Some common brands are Evorel, Nuvelle, Premique, and Prempak-C.

There's not enough research for us to know if side effects caused by treatment with a GnRH analogue, such as hot flushes and thinning bones, are helped by oestrogen and progestogen HRT. But we know this type of HRT does help with hot flushes brought on by the menopause.

Tibolone

Tibolone (brand name Livial) is another type of HRT. It is used to treat the symptoms of the menopause and to help prevent osteoporosis (the bone-thinning disease linked with the menopause). Tibolone acts like the sex hormones that are naturally produced by your body. This means it copies what oestrogens and progestogens do in your body.

Tibolone can:^[40] ^[35] ^[41]

- Help stop your bones thinning. In one study, bone thinning caused by a GnRH analogue was less for the women who also took tibolone
- Help prevent hot flushes, a dry vagina, and night sweats.
- Improve your mood and quality of life.

Raloxifene

Raloxifene (brand name Evista) is used to prevent thinning bones after the menopause. Thinning bones can lead to osteoporosis.

- Your fibroids may shrink more if you take raloxifene at the same time as a GnRH analogue.^[42]
- Your bones are less likely to thin if you take raloxifene along with a GnRH analogue.^[43]
- But raloxifene doesn't prevent hot flushes.

What happens during surgery to remove your womb?

A hysterectomy is an operation to remove your womb. There are two main types.

- In a **total hysterectomy**, your surgeon removes all of your womb, including your cervix. He or she may also take out your ovaries and fallopian tubes.
- In a **subtotal hysterectomy**, your surgeon removes the upper part of your womb but leaves your cervix. He or she may also take out your ovaries and fallopian tubes.

Be sure to talk to your surgeon about which operation is best for you.

Your surgeon may suggest having your ovaries and fallopian tubes removed at the same time as your womb, especially if you're getting close to the menopause.^[61] This is because your ovaries are probably already making less of the hormones oestrogen and progesterone, and will soon stop altogether.

Also, removing them stops you getting cancer of the ovaries (ovarian cancer). And it means you won't get cysts on your ovaries or any other ovary problems.

If you have your ovaries and fallopian tubes removed, you're likely to get symptoms of the menopause. These include a dry or sore vagina and hot flushes (your face and upper body suddenly feel very hot).

One way to help these symptoms is hormone replacement therapy (HRT). Your doctor can tell you more about the pros and cons of this therapy. See our section on the [Menopause](#) to learn more.

Your surgeon can take out your womb in three different ways.

- **Abdominal hysterectomy:** Your surgeon takes out your womb through a large cut in your abdomen.
- **Vaginal hysterectomy:** Your surgeon takes out your womb through your vagina without making any cuts in your abdomen.
- **Keyhole surgery:** Instruments are put through tiny cuts (between 1 centimetre and 2 centimetres long) in your abdomen. These instruments are called laparoscopes. They have a light and a tiny camera at the end and can also have cutting instruments attached to them. Your surgeon cuts away your womb (and fibroids) using these instruments. Your womb can then be removed in two ways. One option is to remove it partly through your vagina and partly through the tiny cuts in your abdomen. This procedure is called a **laparoscopically assisted vaginal hysterectomy**. The other option is to remove your womb just through the tiny cuts in your abdomen. This procedure is called a **total laparoscopic hysterectomy**.

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It's easier for your surgeon to see what he or she is doing in an abdominal hysterectomy. But this is a bigger operation than the other two. And it will leave you with a bigger scar and may be more painful for a week or so afterwards.

You'll probably recover faster if your womb is removed through your vagina, but this operation can be harder to do.^[62] Your surgeon may advise against it if:^[61]

- You have a large womb
- You have large fibroids or lots of them
- Your ovaries are being taken out too.

A hysterectomy takes between 45 minutes and 70 minutes, depending on which type you have. You will be given a general anaesthetic, so you'll sleep through it. You'll need to stay in hospital for:

- Up to a week after an abdominal hysterectomy
- Two days to three days after a vaginal hysterectomy
- One day to two days after a laparoscopically assisted vaginal hysterectomy.

Some women take longer to recover than others. Whatever operation you have, it could be up to six weeks before you get back to work or other activities.

Warnings about side effects of NSAIDs

Nonsteroidal anti-inflammatory drugs (NSAIDs) are used to treat pain and inflammation. Ibuprofen is probably the best-known NSAID. Although they are often useful, they can have side effects, including causing stomach upsets and ulcers, or more rarely, allergies or problems with your kidneys or liver.^[74]

As well as these other side effects, people who take high doses of some NSAIDs for a long time may have a slightly higher risk of getting a heart attack or a stroke. High doses of NSAIDs may be used over a long period of time to treat conditions such as arthritis. People who have heart problems should not take diclofenac.^[73]

It's not always clear what counts as a long time for taking NSAIDs. In some research, two-thirds of the heart attacks happened in studies where people took NSAIDs for a year or longer.^[75]

One type of NSAID that caused side effects was a type called selective COX-2 inhibitors. You are not likely to be prescribed this kind of NSAID to treat fibroids.

Fibroids

Below, we look at the other kinds of NSAIDs and what the research that has been done so far shows about their safety.

NSAIDs you can buy over the counter

You can buy low doses of some NSAIDs, such as ibuprofen, at a pharmacy. Taken at this lower dose and for a short time, ibuprofen doesn't seem to increase people's risk of a heart attack or stroke. ^[76]

You can also get larger doses of ibuprofen on prescription from a doctor (see our information on prescription ibuprofen below). Taking these larger doses every day may slightly increase your risk of a heart attack or stroke. But these doses are higher than the amount you'd take for fibroids or other kinds of short-term pain.

Diclofenac is another NSAID that you can buy in low doses over the counter. It's sold for treating headaches, other aches and pains, and cold and flu symptoms. Diclofenac does increase the risk of heart attacks and strokes if used regularly. ^[77] However, there's probably much less of a risk if you're taking low doses for short periods of time. ^[78]

You can also buy an NSAID called naproxen without a prescription, for treating period pain. Naproxen at the doses people often use for period pain doesn't seem to cause an increase in the risk of heart attacks or strokes. ^{[75] [77] [79]}

NSAIDs your doctor may prescribe

There are several NSAIDs that may be prescribed by your doctor. They include (with brand names):

- diclofenac (Diclomax, Motifene, Voltarol)
- etodolac
- ibuprofen
- ketoprofen (Oruvail, Orudis)
- meloxicam (Mobic)
- naproxen (Naprosyn, Arthrofen).

Some of these NSAIDs may cause a small increase in your risk of a heart attack or stroke. Research has found that regularly taking high doses of ibuprofen or diclofenac over a long period of time may increase your risk of these problems. ^[76]

The body that regulates medicines in the UK to make sure that they work and that they are safe is the Medicines and Healthcare products Regulatory Agency (MHRA). ^[73] It has issued a warning about diclofenac. The MHRA says that people should not take

Fibroids

diclofenac if they have serious heart conditions (such as heart failure, heart disease, or circulatory problems) or if they have ever had a heart attack or stroke.

We don't know exactly how big the risk is, or how it varies between the different drugs. The research that has been done so far suggests that:

- Taking diclofenac increases your risk of heart attack.^[76] There are likely to be three extra heart attacks or strokes every year for every 1,000 people taking high daily doses of diclofenac.
- Naproxen may be safer than diclofenac.^[76] Studies so far seem to show that naproxen doesn't increase people's chances of getting a heart attack or a stroke.^{[75] [77]}

Guidelines for doctors say that for most people, the benefits of these drugs outweigh the risks.^[80] The risks are probably lower for people who only take NSAIDs for a short time or take smaller doses.^[76]

Guidelines for doctors

Doctors have guidelines about how they should prescribe NSAIDs. They say that:^[76]

- People should take the lowest dose of an NSAID that works for them
- People should only take NSAIDs for as long as they need to. People taking them for a long time should have their treatment reviewed regularly
- Doctors should weigh up the risks and benefits of NSAIDs for each person
- People are more likely to get stomach problems if they take aspirin as well as an NSAID. People should only take aspirin and an NSAID together if they really need to.

If you're worried about the medicine you're taking, talk to your doctor.

Glossary:

pelvis

Your pelvis is the area between your hips.

menopause

When a woman stops having periods, it is called the menopause. This usually happens around the age of 50.

ultrasound

Ultrasound is a tool doctors use to create images of the inside of your body. An ultrasound machine sends out high-frequency sound waves, which are directed at an area of your body. The waves reflect off parts of your body to create a picture. Ultrasound is often used to see a developing baby inside a woman's womb.

hormones

Fibroids

Hormones are chemicals that are made in certain parts of the body. They travel through the bloodstream and have an effect on other parts of the body. For example, the female sex hormone oestrogen is made in a woman's ovaries. Oestrogen has many different effects on a woman's body. It makes the breasts grow at puberty and helps control periods. It is also needed to get pregnant.

hormone replacement therapy

Hormone replacement therapy (also called HRT) is given to women after the menopause to replace the oestrogen (the main female hormone) that is no longer made by their ovaries. It can be given either as oestrogen alone or as a combination of oestrogen and progesterone (another female hormone). It is useful to treat menopausal symptoms such as hot flushes, and to prevent brittle bone disease (osteoporosis). But there are concerns that it may increase the risk of breast cancer, heart attacks and strokes.

ovaries

Women have two ovaries, one on each side of their womb. They are small glands that store eggs. Inside the ovaries are hundreds of thousands of pre-eggs, called follicles. Some of these grow into eggs.

fallopian tubes

Fallopian tubes are the two tubes that come out of the top of a woman's womb. They carry eggs from the ovaries to the womb.

bladder

Your bladder is the hollow organ at the top of your pelvis that stores urine. It is similar to a balloon, only with stronger walls. It fills up with urine until you go to the toilet.

cervix

The cervix is a piece of tissue that sits between a woman's womb and her vagina. It has a small opening in it that gets much bigger when a woman is having a baby.

hysterectomy

A hysterectomy is an operation to take out a woman's womb (also called her uterus). Sometimes the ovaries and fallopian tubes are removed as well.

placenta

The placenta is an organ that grows in the womb during pregnancy. It joins the woman to the growing baby. The placenta provides the baby with oxygen, water and nutrients from the mother's blood. It also produces the hormones that are involved in pregnancy.

miscarriage

A miscarriage is when something happens before the 28th week of pregnancy that means the fetus does not survive.

caesarean section

A caesarean section is an operation to take a baby out of a mother's womb. The surgeon makes a cut through her abdomen to take the baby out. You have this if there's a risk that a normal delivery through your vagina would cause harm to you or your baby.

red blood cells

Red blood cells are the part of your blood that makes it red. Their main job is to carry oxygen from your heart and lungs to the tissues of your body. Once these cells unload oxygen, they pick up carbon dioxide. They take carbon dioxide back to your lungs so it can be breathed out of your body.

ultrasound probe

Ultrasound is a technique doctors use to create images of the organs in your body. An ultrasound probe is a device that lets the ultrasound machine focus on an area of your body. The ultrasound machine can then send out high-frequency sound waves, which reflect off parts of your body to create a picture.

osteoporosis

Osteoporosis is when your bones get too brittle. It happens if not enough new bone tissue is growing to keep bones strong. If you have osteoporosis, the bones in your body may break easily.

systematic reviews

A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

randomised controlled trials

Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

general anaesthetic

You may have a type of medicine called a general anaesthetic when you have surgery. It is given to make you unconscious so you don't feel pain when you have surgery.

local anaesthetic

Fibroids

A local anaesthetic is a painkiller that's used to numb one part of your body. You usually get local anaesthetics as injections.

fever

If you have a fever, your body temperature is above 37 degrees Celsius (98.6 degrees Fahrenheit). With a fever you often get other symptoms, such as shivering, headache or sweating. A fever is usually caused by an infection.

antibiotics

These medicines are used to help your immune system fight infection. There are a number of different types of antibiotics that work in different ways to get rid of bacteria, parasites, and other infectious agents. Antibiotics do not work against viruses.

infection

You get an infection when bacteria, a fungus, or a virus get into a part of your body where it shouldn't be. For example, an infection in your nose and airways causes the common cold. An infection in your skin can cause rashes such as athlete's foot. The organisms that cause infections are so tiny that you can't see them without a microscope.

cysts

A cyst is a sac or cavity that develops under your skin and is filled with fluid. Cysts are benign, which means that they are not cancerous.

blood clot

A blood clot forms when the cells in blood clump together. Sometimes this happens to stop you from bleeding if you've had an injury. But it can also happen on the inside of your blood vessels, even when you haven't had an injury. A blood clot inside a blood vessel is called a thrombus.

intestine

Your intestine is a long tube that runs from your stomach to your rectum. Your intestine is divided into two parts: the small intestine and the large intestine. The small intestine helps your body absorb nutrients. The large intestine helps your body absorb water and other materials.

vagina

This is the passage from a woman's womb (uterus) to the outside of her body.

anaemia

Anaemia is when you have too few red blood cells. Anaemia can make you get tired and breathless easily. It can also make you look pale. Anaemia can be caused by a number of different things, including problems with your diet, blood loss and some diseases.

sedation

A feeling of relaxation and calm, or the act of creating a feeling of calm by administering a drug.

inflammation

Inflammation is when your skin or some other part of your body becomes red, swollen, hot, and sore. Inflammation happens because your body is trying to protect you from germs, from something that's in your body and could harm you (like a splinter) or from things that cause allergies (these things are called allergens). Inflammation is one of the ways in which your body heals an infection or an injury.

diarrhoea

Diarrhoea is when you have loose, watery stools and you need to go to the toilet far more often than usual. Doctors say you have diarrhoea if you need to go to the toilet more than three times a day.

ulcer

An ulcer is an open sore. Ulcers can happen in many parts of your body, such as in your stomach, and the skin of your legs, mouth, or genitals.

heart attack

Doctors call a heart attack an acute myocardial infarction (or acute MI). This is the name for the damage that occurs to the heart muscle if it isn't getting enough blood and oxygen because a branch of the coronary arteries is blocked. During a heart attack, you may have pain or heaviness over your chest, and pain, numbness or tingling in your jaw and left arm.

stroke

You have a stroke when the blood supply to a part of your brain is cut off. This damages your brain and can cause symptoms like weakness or numbness on one side of your body. You may also find it hard to speak if you've had a stroke.

arthritis

Arthritis is when your joints become inflamed, making them stiff and painful. There are different kinds of arthritis. Osteoarthritis is the most common type. It happens when the cartilage at the end of your bones becomes damaged and then starts to grow abnormally. Rheumatoid arthritis happens because your immune system attacks the lining of your joints.

intrauterine device (IUD)

Fibroids

An intrauterine device (IUD) is a type of contraceptive. It is a small device made of copper or plastic, with threads at the end. These threads can be left in your vagina while the rest of the device sits in your womb (cervix). IUDs stop eggs sticking to your womb and growing.

MRI scan

A magnetic resonance imaging (MRI) machine uses a magnetic field to create detailed pictures of the inside of your body.

allergy

If you have an allergy to something (such as pollen or a medicine), your body always overreacts to it. The reaction happens because your immune system (your body's system for fighting infection) is too sensitive to it.

urinary tract infection

A urinary tract infection (UTI) happens when bacteria invade the walls of your urinary tract, which includes your kidneys, bladder and urethra. An uncomplicated UTI is one that involves your bladder and urethra, but not your kidneys. A complicated UTI involves your kidneys and can be harder to treat. Doctors may refer to a kidney infection as pyelonephritis.

X-ray

X-rays are pictures taken of the inside of your body. They are made by passing small amounts of radiation through your body and then onto film.

allergic reaction

You have an allergic reaction when your immune system overreacts to a substance that is normally harmless. You can be allergic to particles in the air you are breathing, like pollen (which causes hay fever) or to chemicals on your skin, like detergents (which can cause a rash). People can also have an allergic reaction to drugs, like penicillin.

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