



GnRH analogue injections

Information for patients from Women's Health

This leaflet is for patients who have decided to proceed with GnRH analogue injections. This leaflet explains:

- what this treatment is
- why you have been offered this treatment, and
- how it will help your symptoms.

If you still have questions or concerns after reading this leaflet, please speak to your doctor.

What are GnRH analogue injections?

Gonadotrophin-releasing hormone (GnRH) analogue injections are hormones. We use them to reduce the levels of oestrogen in your body.

Why have I been offered these injections?

GnRH analogues are offered to patients with gynaecological conditions that are affected by the hormones of the menstrual cycle. These include:

- Endometriosis, adenomyosis and pelvic pain, to reduce pain related to the menstrual cycle and heavy periods.
- Fibroids, to reduce symptoms such as heavy periods, or as a long-term treatment if surgery is not an option.
- Given before surgery, such as fibroid removal or endometrial ablation. To make fibroids smaller and / or the endometrial lining thinner, making them easier and safer to remove or treat. It will also give an indication to how you may feel following surgery.
- As a diagnostic test, to see if conditions such as severe pre-menstrual syndrome (PMS) or chronic pain are affected by hormones of the menstrual cycle. This gives us a better idea of how your pain can be managed. If the GnRH analogues are unsuccessful, the removal of the ovaries will also be unsuccessful.

Your doctor may start you on these injections for another medical reason specific to you.

How do the injections help?

The injections help to improve your symptoms, and hopefully your quality of life by:

- reducing or stopping heavy bleeding during your period, and
- helping with your pelvic pain.

When will I have these injections?

The injections are given:

- before surgery as part of surgical preparation, for example to shrink the size of a fibroid, or
- you may wish to have them to avoid complicated surgery.

What types of injection are available? and, how they are given?

East Kent Hospitals use Prostag and Zoladex. Both of these drugs are GnRH analogues. They are only available as an injection given by a doctor / nurse at an appointment either in clinic or the Gynaecology Assessment Unit (GAU). It can be given by a GP as well, if they are trained to do so. Arrangements for further injections will be made at your clinic appointment.

- **Prostag** is given as an injection in your muscle or top layer of fatty tissue. We generally give this injection in the buttock, as this tends to be the largest muscle.
- **Zoladex** is only given via the subcutaneous route (top layer of fatty tissue) of the abdomen. Zoladex is slowly absorbed into your body over a period of time. It is normal to feel a small lump under the injection site once the injection has been given.

How do these injections work?

Both injections work in the same way. The medication is a hormone, used to reduce the levels of oestrogen in your body.

When the medication is first given, there will be an increase in your body's hormone levels. This will lead to a flare-up of your symptoms, which should only last for the first two weeks of treatment.

Continuing injections will reduce your hormone levels. This will result in reduced oestrogen levels, which will stop you ovulating and cause a medically-induced menopause (anovulation). When this happens your periods will stop, and your pelvic pain will reduce.

Most women will stop bleeding and notice an improvement in their symptoms within two months of starting treatment.

How often will I need the injections?

For both Prostag and Zoladex there are two doses available:

- Prostag 3.75mg (every 4 weeks)
- Prostag 11.25mg (every 12 weeks)
- Zoladex 3.6mg (every week)
- Zoladex 10.8mg (every 12 weeks)

Which dose you are given will depend on how long the drug works for you. Your doctor or nurse will tell you which dose you have received, and when your next injection is.

If you are only having a single injection (such as in preparation for surgery) you may not need to have further injections. However, if you are having ongoing treatment with GnRH injections, you will need to come to injection clinics every 4 or 12 weeks.

What are the side effects?

Most of the side effects are the same as those linked with menopause. These include hot flushes, mood swings, depression, and vaginal dryness.

- GnRH injections may increase your risk of osteoporosis (thinning of bones).
- Vaginal bleeding may occur during treatment.
- Blood sugar levels may be affected during treatment. If you are diabetic, you may need to monitor your blood sugar levels more often.
- **You may develop a rash, itching, shortness of breath, or difficulty breathing. Although these are rare, these could be symptoms of a severe allergic reaction, and you should go to your nearest Emergency Department.**

Very common side effects (affects more than one in 10 people)

- Difficulty sleeping
- Headaches
- Hot flushes.

Common side effects (affects between one in 100 and one in 10 people)

- Weight changes
- Mood changes, including depression
- Tingling in hands or feet, and swollen ankles
- Dizziness and feeling sick
- Joint pain and muscle weakness
- Breast pain and changes in breast size

- Vaginal dryness
- Skin reactions at the injection site (these include skin hardening, redness, pain, abscesses, swelling, lumps, ulcers, and skin damage).

Uncommon (affects between 1 in 1000 and 1 in 100 people)

- Loss of appetite
- Changes in blood lipids (cholesterol) and your eyesight
- Pounding heartbeats
- Diarrhoea and vomiting
- Abnormalities in liver blood tests
- Hair loss
- Muscle aches, fever, chills, or tiredness.

If you have any of these side effects, please tell a member of your Gynaecology team.

How can I manage these side effects?

Your symptoms can be managed with hormone replacement therapy (HRT). HRT is usually given with GnRH injections, to prevent or reduce side effects linked with menopause.

A low dose of oestrogen (such as Tibolone) is usually the first HRT medication offered. One tablet should be taken every day, at the same time.

If the first prescribed HRT does not manage your symptoms, then other HRT medications can be offered. The doses of the hormone used are small. They will not reduce the effectiveness of the GnRH analogue injection.

The most serious side effect of GnRH analogue treatment is thinning of the bones (osteoporosis). If you are given GnRH injections without HRT, your risk of developing osteoporosis increases. Using HRT over the long-term, reduces your risk of bone thinning and developing osteoporosis. You will have a bone density scan (DEXA scan) two years after treatment. This scan will make sure that your bone density is within the normal range. We will also recommend a six month break in your GnRH injections at this time.

The decision to start HRT will be made by your doctor at your clinic appointment taking into consideration your symptoms and length of treatment.

For more information on HRT, please read the Trust's **Hormone Replacement Therapy (HRT)** leaflet. (<https://leaflets.ekhft.nhs.uk/hormone-replacement-therapy-hrt/html/>)

What happens during my injection clinic appointments?

Each clinic appointment will last between 15 to 30 minutes.

Please bring any current prescriptions to this appointment. The nurse / doctor will check what medications you are taking, and whether they might interact with the injection.

The nurse / doctor will also discuss any side effects. If you have had any, the nurse / doctor may change your treatment plan, and add / or change your HRT medication.

This appointment also gives you a chance to discuss any concerns that you may have.

Can I have injections if I am pregnant?

No. You will not have injections if you are pregnant. Although the injections aim to prevent ovulation, the injections are not licensed as a contraception.

The nurse may ask you for a urine sample during your clinic appointment. This is to check if you are pregnant.

You should use non-hormonal / barrier contraception (such as condoms or a diaphragm) to prevent any pregnancy during GnRH treatment.

How long can I have injections for?

- **If you are taking the injections without HRT**, you can receive this treatment for up to six months. This is due to the increased risk of osteoporosis.
- **If you are prescribed HRT with your GnRH analogue injections**, you can receive this treatment for two years. A six month treatment break will then be advised and a bone scan carried out.

What happens when I stop having the injections?

Your oestrogen (hormone) levels will start to increase when the last GnRH analogue injection has worn off.

Ovulation and periods should return to normal within 6 to 10 weeks. The longer the treatment, the longer it may take for your periods to return.

The side effects linked with low oestrogen should reduce as your oestrogen levels increase. Symptoms such as heavy, painful periods and pelvic pain may return.

There will be no effect on your fertility once you begin ovulating again.

What if I decide to stop the treatment?

If your body has not gone through the "menopause", the "menopause" caused by the GnRH analogue is temporary and reversible. Once the medication is stopped, periods normally restart after six to 10 weeks.

If you still have your periods, there are no long-term effects on your fertility.

Unfortunately, without further treatment, any symptoms that stopped while taking GnRH analogue are likely to return. Once treatment is stopped, the timing and severity of these symptoms returning is difficult to predict.

Please speak to your doctor if you wish to stop / try different treatment options.

Useful web sites

- Royal College of Obstetricians and Gynaecologists (<https://www.rcog.org.uk/>)
- Endometriosis UK (<https://www.endometriosis-uk.org>)

Contact details

- Gynaecology Assessment Unit (GAU), **Queen Elizabeth the Queen Mother (QEQM) Hospital**, Margate
Telephone: 01843 235009
- Gynaecology Assessment Unit (GAU), **William Harvey Hospital**, Ashford
Telephone: 01233 633331 extension 723-4257

This leaflet has been produced with and for patients.

Please let us know:

- If you have any accessibility needs; this includes needing a hearing loop or wanting someone to come with you to your appointment.
- If you need an interpreter.
- If you need this information in another format (such as Braille, audio, large print or Easy Read).

You can let us know this by:

- Visiting the Trust web site (<https://www.ekhuft.nhs.uk/ais>).
- Calling the number at the top of your appointment letter.
- Adding this information to the Patient Portal (<https://pp.ekhuft.nhs.uk/login>).
- Telling a member of staff at your next appointment.

Any complaints, comments, concerns or compliments, please speak to a member of your healthcare team. Or contact the Patient Advice and Liaison Service on 01227 783145 or email (ekh-tr.pals@nhs.net).

Patients should not bring large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

Further patient information leaflets are available via the East Kent Hospitals' web site (<https://www.ekhuft.nhs.uk/patient-information>).

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