

GnRH analogue injections

Information for patients



This leaflet is for those who have been offered GNRH analogue injections to treat a gynaecological condition.

It explains;

- What conditions can be managed with GNRH analogues.
- What the medication is and how it works.
- What are its side effects.
- How long you can take it and where to seek advice if you have further questions.

Why have I been offered these injections?

Gonadotrophin-releasing hormone (GnRH) analogue injections are used for the management of numerous gynaecological conditions including:

- Endometriosis.
- Uterine fibroids.
- Adenomyosis.
- Menorrhagia.
- Pelvic pain.
- Severe premenstrual syndrome also known as premenstrual dysphoric disorder (PMDD).

The overall aim of GNRH analogue injections is to improve symptoms caused by the conditions above. These include pelvic pain, heavy periods and pressure symptoms. In some cases, it is offered to address mood changes related to premenstrual dysphoric disorder (PMDD).

The hope is that this injection will improve your quality of life. The injections are also sometimes offered to take before some gynaecological surgery such as hysterectomy and myomectomy. The aim is to reduce the risks associated with surgery such as bleeding heavily. The reason you are being offered GNRH analogue injections will be discussed with you at your consultation.

Types of GNRH analogue available and how they are given

The most used GNRH analogue we use is called Prostag although you may be offered another type of GNRH analogue. Prostag is only available in injection form.

How do GNRH analogue injections work?

GNRH analogues are a group of synthetic hormones which mimic the menopause. By entering a temporary menopausal state, the aim is to stop your periods and reduce other symptoms related to your periods such as pelvic pain. You will normally notice an improvement to symptoms within two months of starting treatment although it can take longer for maximal effect.

GNRH analogues slow or stop the release of hormones called luteinizing hormone (LH) and follicle stimulating hormone (FSH) from your pituitary gland, which is an organ in your brain. By affecting the release of LH and FSH, GNRH analogues reduce the production of estrogen and progesterone hormones from your ovaries. Estrogen and progesterone are responsible for causing periods, so reducing their levels in your body should stop periods.

When the GNRH analogue is first given, there is an initial increase in estrogen hormone. You may, therefore, experience an initial worsening of your symptoms. This should only last for the first two weeks of treatment and your doctor may offer you additional treatment to try and reduce this flare. Once the first two weeks are over, you should find that the treatment will begin to help your symptoms.

What are the side effects?

You might experience side effects associated with menopause, such as hot flushes, mood swings, depression and vaginal dryness. GnRH injections may also increase the risk of osteoporosis if taken long term. Your periods may not stop altogether but may reduce in volume. Blood sugar levels may be altered during treatment with GnRH analogues. If you have diabetes, you may require more frequent monitoring of your blood glucose levels. If you have diabetes you may need to adjust your diabetes medication.

Uncommonly, you can develop a severe rash, severe itching (local allergic reaction) at the injection site. Rarely you can develop shortness of breath or difficulty breathing (anaphylactic reaction) after an injection. Please attend your nearest Emergency department if you get such symptoms.

Common (may affect up to 1 in 10 people) side effects

- Difficulty sleeping, headaches or hot flushes.
- 'Brain fog', weight changes, mood changes.
- Joint pain, muscle weakness, breast tenderness, vaginal dryness.
- Skin reactions at the injection site.

Uncommon (may affect more than 1 in 100 people)

Loss of appetite, changes in blood lipids (cholesterol), altered vision, pounding heartbeats, diarrhoea, vomiting, abnormalities in liver blood tests, hair loss, muscle aches, fever, chills or tiredness.

How can these side effects be managed?

Most side effects of GnRH analogues are associated with low oestrogen levels. Therefore, they can be managed with the use of Hormone Replacement Therapy (HRT). HRT is usually given alongside GnRH injections to prevent or reduce side effects associated with the menopause including loss of bone density.

Tibolone (2.5 milligram tablet daily) is usually the first line HRT medication offered. Your doctor might offer you other HRT options. The dose of HRT is small so that it does not reduce the effectiveness of the GnRH analogue injection.

You may not be suitable for or decline HRT. The most serious side effect of GnRH analogue treatment is thinning of the bones (osteoporosis). If GnRH analogue treatment is given without HRT then you are at increased risk of osteoporosis. You will either be advised to take treatment in six month intervals to allow your bones to rebuild strength or you will be offered a bone density scan (also known as a DEXA scan – Dual Energy X-ray Absorptiometry) about 12 to 18 months after you have started your treatment.

You should also consider adjusting for any risk factors for osteoporosis such as stop smoking, doing regular exercise and getting regular exposure to the sun and reducing alcohol intake.

After your first bone density scan your doctor might recommend further scans to monitor your bone density if you continue to take GNRH analogues beyond 2 years (with or without HRT). Please note that there is limited data on bone health when taking GNRH analogue treatment beyond 2 years of treatment, however the limited evidence available suggests that bone density appears to be largely protected if you take HRT with your GNRH analogue injections.

How often will I need injections?

Prostap comes in two doses:

- **Prostap 3.75mg (4 weekly)**
- **Prostap 11.25mg (12 weekly)**

Your doctor or nurse will inform you of which dose you have been offered and prescribed when you are next due an injection. You may need to attend your GP surgery for injections on a 4-weekly or 12-weekly basis.

Pregnancy and Contraception

Although the GnRH injections tend to prevent ovulation they are not licensed as a form of contraception. Please make sure that you are on a suitable contraceptive such as condoms or diaphragm or non-hormonal (copper) coil if you are sexually active. You may be asked to provide a urine sample during your clinic appointment to confirm that you are not pregnant before the injections are given. Injections will not be given if you are pregnant.

How long can I continue on this management regime?

GnRH analogue injections can be used long term. However, if you do, you might be advised to use HRT to reduce the risk of developing osteoporosis.

What to expect when I stop having the injections?

If your body has not gone through the menopause, once the last GNRH analogue injection has worn off, estrogen levels will start to increase. Ovulation and your periods will normally return within 6 – 10 weeks. The longer the course of treatment the longer it may take for periods to return. The symptoms related to your gynaecological condition, such as heavy, painful periods and pelvic pain might return. There will be no negative impact caused by the

GNRH analogue treatment to ongoing fertility once ovulation has returned. However, if you are on long term GNRH analogues please be aware that increasing age affects fertility.

If you stop taking GNRH analogues around the time of your natural menopause you may find that your periods are far less frequent than when you started GNRH analogue injections. If you have gone through the menopause while on GNRH analogue therapy your periods will not return.

For more information

Please speak to your doctor about this treatment if you have any further questions.

The websites below also provide some information on the conditions treated by GNRH analogues.

Royal College of Obstetricians and Gynaecologist

- www.rcog.org.uk

Endometriosis UK

- www.endometriosis-uk.org

What did you think of your care?

Scan the QR code or visit bit.ly/nhsleedsfft

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