Hormone Implants as Hormone Replacement Therapy (HRT)

This leaflet aims to answer your questions about Hormone Implants as Hormone Replacement Therapy. If you have any questions or concerns, please speak to a doctor or nurse caring for you.

What are hormone implants?

A hormone implant is a small pellet containing body-identical hormones. The pellets are inserted into the fat layer under the skin. Implants are a non-reversible form of HRT and cannot be removed once inserted.

We have two types of implants: estradiol and testosterone. Both implants are unlicensed medicines (not licensed for use in the UK but can be used by specialists). Implants are used if other forms of HRT have not been absorbed. Occasionally they are inserted after a hysterectomy.

These hormones are released over a six to eight month period. However, the residual estradiol implant may continue to release small amounts of estradiol for up to 24 months. Implants are usually given every 6-12 months and not more frequently. A blood test to monitor your hormone level is required prior to implant insertion. If your blood test result is high, then your next implant may be delayed. We aim for an estradiol blood level of less than 600pmol/L to ensure safe practice and normal therapeutic range blood levels are maintained.

How is an implant inserted?

Implants are inserted under the skin, in the fat layer, either in the abdomen or buttock. You will be given some local anaesthetic to numb the area before a small cut is made in the skin. Using an “introducer” (a device) the pellet is inserted into the fat layer.

The wound is then closed with either a dissolvable stitch or “Steri-Strips”. A dressing is then applied which can be removed after 24 hours. If you have had a stitch inserted this can dissolve or be removed in 7-10 days.

What can I expect after my implant has been inserted?

It is normal to expect some bruising and pain at the insertion site. Simple pain relief such as paracetamol and ibuprofen can be taken to help this. You will be left with a small scar from the incision.

Very rarely the implant can become infected. If you have any redness on the skin, you feel unwell or have a temperature, you may need antibiotics. These can be obtained from your GP / urgent care centre, if required.

In extremely rare circumstances the implant can be rejected and make its way out. If this happens, please contact the menopause clinic.

What are the risks and benefits of an estradiol implant?

Please speak to your clinician for individualised risks and benefits and to ensure that you are happy to proceed or continue with this form of treatment.

The risks and benefits of estradiol implants are the same as for any transdermal (via the skin) hormone replacement therapy (HRT). Benefits include improved response, when other treatments have failed and long-term bone protection. Risks are comparable to other transdermal estradiol preparations when the serum estradiol remains within normal physiological range.

There is also a risk of tachyphylaxis (see below).

What is “tachyphylaxis”?

Over time the estradiol level in the blood accumulates. The residual implant may continue to release small amounts of estradiol for up to 24 months.

Studies have shown that in approximately 3% of women using HRT implants, the body becomes progressively unresponsive to increasing levels of estradiol. The menopausal symptoms return, despite having high levels of estradiol. This is due to desensitisation. If your blood test result is high, then your next implant may be delayed. We aim for an estradiol blood level of less than 600pmol/L.

Do I need progesterone / progestogen?

If you still have your womb (uterus) you will need progesterone to protect the endometrium (womb lining) from endometrial thickening (endometrial hyperplasia) which can lead to endometrial cancer. We offer progesterone / progestogen with a Mirena coil or tablets. These options can be explored with your doctor.

If you have had a sub total hysterectomy (where your cervix has not been removed) we would suggest a trial of progesterone / progestogen to see if any endometrial tissue

remains within the cervix.

If you have had a total hysterectomy (where your cervix and uterus have been removed) you do not need progesterone / progestogen. However, if you have been previously diagnosed with severe endometriosis, please inform your clinician.

What is the benefit of testosterone?

Testosterone has been shown to be beneficial if you are experiencing reduced libido.

Does testosterone have side effects?

Testosterone can be used as a gel (Testogel / Tostran) or as an implant. These implants aim to deliver a normal female dose. However, this depends on individual sensitivity and the side effects can vary.

Side effects include:

- Increased body or facial hair (uncommon)
- Alopecia or male pattern hair loss (uncommon)
- Greasy skin or acne (uncommon)
- Deepening of the voice (rare)
- Enlarged clitoris (rare).

We are lacking in long term data regarding testosterone in women. If you would like to discuss testosterone supplementation further, please mention this in your consultation.

What if I want to stop using Implants?

If you feel that you no longer wish to use implants you will need to continue to use progesterone to protect the lining of the womb, until your estradiol level is less than 100pmol/L. Please note that the residual estradiol implant may continue to release small amounts of estradiol for up to 24 months.

Useful sources of information

British Menopause Society | For healthcare professionals and others specialising in post reproductive health (thebms.org.uk)

Women's Health Concern | Confidential Advice, Reassurance and Education (womens-health-concern.org)

Contact us

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).
Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

References

Sources used for the information in this leaflet

International Menopause Society including "Global Consensus Position Statement on the Use of Testosterone Therapy for Women", www.imsociety.org

National Institute for Health and Care Excellence. Menopause: clinical guideline – methods, evidence and recommendations, (NG23), updated 5th December 2019 https://www.nice.org.uk/guidance/ng23

'Management of the menopause: The handbook of the British Menopause Society', 6th edition, May 2017

The British Menopause Society and Women's Health Concern www.thebms.org.uk; www.womens-health-concern.org

British National Formulary 82, section 6.4.1: 'Female sex hormones', March 2022

Medicines and Healthcare products Regulatory Agency, drug safety update, December 2014

National Osteoporosis Society position statement, 'Hormone replacement therapy for the treatment and prevention of osteoporosis', June 2011

Endocrine Society, 'Postmenopausal hormone therapy: An endocrine society scientific statement', July 2010

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