

Testosterone as part of HRT

Women have testosterone as well as men, though at much lower levels. Before the menopause this is produced in the ovaries but amounts from the ovary reduce with age. Importantly, some is still usually produced in the adrenal glands, even at or after the menopause.

Some women seem to suffer symptoms at the perimenopause or after the menopause that can sometimes also be related to a lack of testosterone. These might include:

- mood problems
- unexplained fatigue
- change in sexual function including reduction in libido
- change in cognition – reduced ability to concentrate and reduced mental performance
- vasomotor symptoms (hot flushes/ sweats)
- bone loss
- decreased muscle strength

Many of these symptoms overlap with oestrogen deficiency symptoms, and so for a lot of women “standard” HRT will correct many or all of these. (Standard HRT: oestrogen replacement, with progesterone too if you still have a womb.)

If a woman has a significant reduction in libido, which is causing her distress or problems, testosterone therapy can be considered. On the occasions when oestrogen replacement is at optimal doses and still not adequately managing the symptoms, it may be an option to trial adding some testosterone in very low doses to see if this improves symptom control. This is more likely to be suitable if a blood test shows a low total testosterone.

Prescriptions, monitoring, and response

Testosterone is not licensed for use in women in the UK. So, when it is prescribed, this is done so “off license” and needs to be a decision on which you and your doctor agree – not all doctors may feel comfortable taking responsibility for off-license prescribing if it is not a therapy area they have experience in.

Testosterone products are not currently produced in easily available dosing for women, and you will need to use only very tiny amounts, and the response will need to be monitored. The blood test for follow up we are recommending at 6-12 weeks and then every 6-12 months as it is important to maintain a testosterone level that does not exceed the normal range for a female. **Please DO NOT apply the testosterone on the morning of your monitoring blood sample.**

If levels are found to be higher than the normal female range, reducing the dose by applying it less frequently will be advised, this is to avoid side effects.

Testosterone therapy will not work overnight – symptoms may gradually improve over weeks or months, but, if no improvement has been seen 6 months after starting the treatment, then it is not sensible to continue.

Unfortunately, some women do not seem to respond well to Testosterone therapy for low libido. This may be because libido in women is influenced by much more than hormones.

Safety

So far as we know, transdermal testosterone is safe for women when used in low doses and kept in the normal female range, though it must be noted there is not much data on its use beyond 2 years.

The available evidence reassures us that it is not associated with increase in blood pressure, or a worsening of kidney function, liver function or blood counts. There is no increase in breast cancer or endometrial problems in the short term.

If you have had breast cancer already, the decision about whether to prescribe testosterone would only be taken by a hospital specialist menopause clinician, after discussion with an oncologist.

Side Effects

It is possible to get occasional acne and increased hair growth at the sites where the testosterone is applied.

If levels are kept within the normal female range, “masculinisation” side effects such as increased facial hair, voice deepening or balding should not occur.

If levels exceed the normal female range, there is a danger of irreversible side effects such as hair loss, voice deepening and abnormal enlargement of the clitoris. This is why blood tests are important every 6 months to ensure that the level is not too high.

Apply the testosterone to the outer thigh or lower abdomen. There is no need for concern about transfer to a male partner via skin contact, but care should be taken to avoid transfer to other females or children. Hands should be thoroughly washed after application.

How to use

- Testogel: testosterone gel in 2.5g sachets containing 40.5mg. Starting dose is 1/8th sachet/ day (=5mg)

- each sachet should last 8 days.
- Tostran2% testosterone gel in canister of 60g.one pump = 0.5g = 10mg. Use one pump three times per week (apply one metered dose on Mondays / Wednesdays / Fridays)
- Testim:1% gel in 5ml tube with sealable lid – 0.5ml (5mg) / day = tube should last 10 days
- AndroFeme 1% testosterone cream in 50ml tube Start dose 0.5ml (5mg) / day
 - each tube lasts 100 days. (This product is only available privately)

Further Reading

<https://www.womens-health-concern.org/wp-content/uploads/2022/12/22-WHC-FACTSHEET-Testosterone-for-women-NOV2022-B.pdf>

Credit:

Dr Rachel Barnes, Kenmore Medical Centre April 2020, updated June 2023 by the Testosterone Pilot Sub-Group of the Cheshire and Merseyside Menopause Special Interest Group

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