

Adult testosterone hormone therapy at Swedish Health Services

Overview

Testosterone hormone therapy is offered to patients whose gender identity does not match their sex assigned at birth. Gender affirming medical therapies, which may or may not include testosterone, menstrual suppression options, or surgical procedures, help to achieve physical, sexual and/or emotional changes to align with one's gender identity. The decision to select one of these options is up to you. It's your clinician's job to inform you of all available options keeping in mind your medical history and medications you currently take for other conditions.

Benefits

The benefits of testosterone hormonal therapy are many and what is described below is just a handful which may or may not apply to all our gender diverse patients. First and foremost, testosterone hormone therapy helps to align your body, sexuality, and emotional health with your gender identity. The changes with testosterone therapy may be reversible or irreversible. The difficulty with our current state of gender affirming masculinizing therapy is we can't target specific goals as testosterone affects many systems at the same time. This is why it's important to maintain communication with your clinician regarding your goals.

Effects of testosterone hormone therapy

Testosterone hormone therapy may result in the following:

Reversible

- Skin changes resulting in oilier skin with possible acne
- Menstrual suppression or lighter cycles
- Increased fat deposition in the abdominal area
- Increased muscle mass and strength

Irreversible

- Bottom growth or clitoral enlargement
- Voice changes often resulting in a lower register (deeper voice)
- Facial and body hair growth which may be thicker than what you have present
- Scalp hair loss or hair thinning

Fertility/sexual changes/effects (may or may not be permanent)

- Changes/loss in fertility although still may be able to get pregnant while on testosterone
- Vaginal or front hole dryness, irritation, and decreased lubrication
- Discomfort with vaginal or front hole intercourse
- Increased libido or sex drive

Please note it may take months to see an effect and it will take years to see the full effect of hormonal therapy. Your response to testosterone hormone therapy primarily depends on your genetics and the age when you start hormone therapy.

Dr. Maddie Deutsch, the medical director for UCSF Transgender Care and an associate professor of clinical family & community medicine at the University of California – San Francisco, has a [great description](#) on what to expect during hormone therapy.

Risks, potential complications, and contraindications (reasons why some feminizing options are too dangerous)

Testosterone hormone therapy may have the following risks which may be higher in people with certain medical conditions. The overall increase in risks is small but is higher depending on your overall health history. These include, but are not limited to:

Testosterone

- Increase in red blood cell mass which may increase the risk of blood clot development and other effects on the body
- Weight gain with possible development of sleep apnea
- Acne
- Permanent scalp hair loss
- Liver inflammation and/or damage
- Cholesterol level changes
- Mood changes
- Heart disease and/or stroke
- High blood pressure
- Diabetes
- Loss of fertility or fertility changes
- Unknown risk of ovarian or uterine cancer with likely decreased risk of chest tissue cancer
- Negative effects on pregnancy (mainly with developing embryo/fetus)

There are certain health conditions which will warrant closer monitoring and your clinician may recommend certain formulations/dosing. These conditions may include:

- Diabetes
- Heart disease (history of heart attacks, stent placement, bypass surgeries)
- Personal or family history of blood clots
- Kidney disease
- Liver disease
- Tobacco use
- Hormone sensitive tumors

Hormone therapy options

There are two main classes of therapy options for those who seek testosterone hormone therapy.

Testosterone

Testosterone is the primary option for those seeking hormone therapy. Oftentimes, testosterone alone is enough for many patients to achieve the effects sought out including suppression of menstruation. Testosterone comes in the following forms:

- **Injection:** most clinicians will advise injecting just under the skin in the adipose/fatty tissue but injecting into the muscle is acceptable, as well. It's usually in the middle of the road with cost and injections often occurring once every week or once every 2 weeks.
- **Creams/gels/ointments:** this is a great option for those who don't want to use patches or inject themselves with medication. These are applied every night. Some issues which may arise come from possible skin reactions and avoiding contact with others to avoid exposure.
- **Patches:** these may be more expensive and may require a prior authorization. Patches are applied every day. The most common issues with patches include the development of rashes, cost, and the patches falling off.
- **Pellets:** this is a great option for those who have been on hormone therapy for years and are on stable doses. Pellets are placed about every 3 months and will require a procedure in the office. These will require a prior authorization and there is no guarantee it will be covered by insurance.

Please keep in mind these are some general principles and will depend on your preference.

Menstrual suppression

These therapies are available for those who continue to have cycles and/or identify as nonbinary. These are also great options for contraception, as well.

- **Intrauterine contraception:** the most common device used contains a small amount of progesterone called levonorgestrel. The amount in these devices is low and wouldn't impact testosterone hormone therapy.
- **Surgical therapies:** two options include hysterectomy (removal of the uterus and often includes removal of the fallopian tubes with possible gonad removal) and endometrial ablation which is a procedure which treats the lining of the uterus to prevent menstruation. These options may be discussed with one of our surgeons and will work with you to see which option is best.
- **Medication options:** options include pills (estrogen/progesterone or progesterone only), patches, front hole rings and injectable progesterone. The amount of hormones in these options won't affect your hormone therapy but also depends on your preference and thoughts.

Healthcare maintenance

Your clinician will work with you to identify the screenings we may offer you based upon you as a complete person and your medical history. These include but are not limited to the following:

- **Chest tissue cancer screening:** recommendations depend on if you had top/chest surgery. Those who haven't had top surgery should have screenings performed starting at age 40 vs 50 (please consult your clinician). Those who had surgery should have an annual chest wall exam by your clinician as there is still a chance of residual chest tissue which requires screening.

- **Cervical cancer screening:** recommendations will depend on if you have a cervix or if you had any history of cervical disease. Options include the traditional Pap smear and, for those who qualify based upon previous history, self-swabs to check for HPV (human papilloma virus which is the most common cause of cervical cancer). Your clinician will use all available resources to support you in this screening test.
- **Abdominal aortic aneurysm screening:** recommendations are based upon sex assigned at birth and those who have any history of tobacco use. There are no formal recommendations for those who are on testosterone and should be a decision made by you and your clinician.
- **Cholesterol medication use:** recommendations are also based upon sex assigned at birth for those age 40 to 75. Clinicians may also consider how long you've been on hormone therapy and your age.
- **Osteoporosis screening:** all patients on hormone therapy should get screened when they turn 65 years of age but we may offer screening earlier depending on hormone status and/or if they had their gonads removed

There will be other healthcare maintenance items discussed at other visits so please be sure to discuss these with your clinician at your annual exams.

Please also review the general overview of adult gender affirming healthcare for more information.