

Masculinizing Treatment for Transgender Males

What are the options for masculinizing treatments?

For some transgender male adolescents and adults, (individuals assigned female at birth and identify as males) it is very important to have the outside appearance match the inside gender identity. For some people this can involve social changes such as hair, clothing styles, name, pronouns (he/him/his), and for others, it involves changing the body with hormones, such as testosterone, and/or surgery. Masculinizing therapy is recommended by the Pediatric Endocrine Society for adolescents with gender dysphoria who meet specific criteria (Endocrine Society Guidelines 2017).

What is testosterone? What does it do to the body?

Testosterone is a hormone that sends signals to the body to change in a masculine way. Every adult has testosterone, but typically adult men have more testosterone and adult women have more estrogen and little testosterone. Testosterone causes permanent changes such as deeper voice, increase in facial and body hair, possible loss of scalp hair (baldness), and increased size of the clitoris (the sensitive part of the genitals) that can grow about an inch in length. Testosterone can also cause increased muscle mass and upper body strength, stop menstrual periods from occurring, increase energy, and strengthen bone mass. In a transmale adolescent who has not undergone a complete (female) puberty, testosterone can also induce masculine facial features and bone structure, including taller height.

Will testosterone cause breasts and female features to go away?

Testosterone can cause the body to have more fat around the abdomen and less around the hips and thighs, so there can be fewer curves. Breast development that has already occurred may flatten a little bit, but breasts do not go away completely. Some transgender males choose to wear a compression binder or sports bra to flatten the appearance of the chest. Others may choose to have chest reconstruction ('top') surgery in adulthood to remove breast tissue and have a more masculine appearing chest.

How is testosterone taken?

Testosterone can be given in several ways. There is no pill. It can be given as a shot that is in the muscle (intramuscular/IM), like a vaccine, or under the skin (subcutaneous) like an insulin shot. There are other forms, such as a patch that sticks to the skin, or as a gel that goes on shoulders. Testosterone gel can be spread very easily to close contacts, so it can be sometimes difficult to use it

because other family members could end up with unwanted testosterone effects.

Those using testosterone gel, must be very careful to wash their hands and use their own towel after applying the medication.

Financial coverage or payment by insurance companies can be difficult to obtain. Nevertheless, more insurance companies are covering the costs. It is important to review with your insurance carrier benefits coverage for this service.

How fast do these changes occur?

Just as puberty is a process that can take 2-3 years, the changes from testosterone can take months to years. In the first few months, the expected changes include oilier skin, increased acne, and slightly more facial hair and body hair. Menstrual periods typically stop after 6 months, though this is different for everyone. People may notice increased libido (sexual interest) and clitoral growth in the first 6 months as well. Voice changes begin in the first few months and include voice cracking before reaching a deeper voice in 1-2 years. Body shape changes with fat redistribution, muscle mass growth, body and facial hair growth can take place over 2-3 years.

What are the risks of taking testosterone? Can it be dangerous?

As with any medication there are always potential risks, and the risks may be higher if too much medication is taken. The major risks include concerns about heart health as testosterone is associated with earlier heart disease and a less favorable cholesterol profile, as is true for cisgender men. It is thought that heart risk would be similar for a transgender male teenager and his cisgender brother. Heart disease risk can be reduced by eating a healthy diet, keeping a healthy weight, exercising, avoiding smoking, and monitoring blood pressure. Testosterone can also cause higher hemoglobin and hematocrit (red blood cells) and this is usually monitored by the prescribing doctor. If a level is too high, it could put a person at risk for a stroke. The levels are usually in the same range as other adolescent and adult male blood ranges and have not been shown to cause problems. Testosterone can be associated with mood changes, including increased irritability, similar to pubertal changes. Some people experience a higher metabolism and increased appetite while on testosterone; depending on activity and food intake, weight changes may occur.

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Will testosterone cause infertility? Can a transgender man get pregnant while on testosterone?

The effects of testosterone on fertility (the ability of an egg to get fertilized by a sperm or to carry a pregnancy) are not fully predictable. It is possible that taking testosterone may affect the ovaries and eggs, but it is also possible that the eggs will be unaffected. Typically, while people take testosterone the menstrual periods will stop, but that does not mean that ovulation and egg development stops. Therefore, it is very important that if people have sex that could result in egg meeting sperm, there must be contraception used, because pregnancy could still happen. There are transgender men who became pregnant even after years of being on testosterone. Knowing that some people do have typical fertility even after years of testosterone, contraception is very important. If fertility preservation (saving eggs to improve chances of having a child genetically related) is desired, it is important to discuss this with your doctors before starting testosterone because the long-term potential for fertility is unclear. Testosterone must be stopped immediately if pregnant as it can cause serious problems with fetal development.

What kind of masculinizing surgeries are there?

Not every transition involves surgery, but for some people it is a necessary part of their journey. Some transgender men have "top" surgery to remove breast tissue and have a flat, masculine chest. Others may have surgery to remove the uterus, ovaries, cervix and vagina, and to create a penis and scrotum. Some transgender men choose not to have surgery. In most cases, surgery is not recommended before attaining legal adult age (18 in the US).

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