

Information about Masculinizing Hormone Treatment

You are considering taking testosterone, so here is some important information about some of the medications, risks, expectations, and long-term considerations associated with masculinizing hormone treatment.

To date, no controlled clinical trials of any feminizing/masculinizing hormone regimen have been conducted to evaluate safety or efficacy in producing physical transition. As a result, wide variation in doses and types of treatment have been published in the medical literature. It is important to remember that everyone is different; the extent of change and the rate at which your changes take place depend on many factors. These factors include your genetics, the age at which you start taking hormones, and your overall state of health.

It is also important to remember that because everyone is different, your medicines or dosages may vary widely from those of your friends, or from what you may have read in books or online. Many people are eager for changes to take place rapidly; please remember that you are going through a process often likened to a second puberty, and puberty normally takes several years for the full effects to be seen. Taking higher doses of hormones will not necessarily make things move more quickly; it may, however, endanger your health.

Testosterone Delivery

Testosterone comes in several forms. Most people starting masculinizing hormones begin by using an injectable form of testosterone, which is safe and effective. Some choose to begin on a lower dose and increase slowly, while others choose to begin at a standard dose. Both approaches have their pros and cons, and you can discuss this with your prescribing medical professional.

Testosterone levels tend to be most even when the injections are given weekly. There are also transdermal forms (patches, gels, and creams) available. Most people will need to start with injections in order to see significant changes; some may then change to one of the transdermal forms.

Taking more testosterone will not make your changes progress more quickly and can be unsafe. Excess testosterone can be converted to estrogen, which can then increase your risks of hyperplasia or cancer, as well as make you feel anxious or agitated, can harm your liver, and can cause your cholesterol or blood count to get too high. It is important to be patient, and to remember that puberty can take years to develop all of its changes.

There are four areas where you can expect changes to occur as your hormone therapy progresses.

1) Physical

The first changes you will probably notice are that your skin will become a bit thicker and oilier. Your pores will become larger, and there will be more oil production. You may develop acne, which in some cases can be bothersome or severe. Acne can be managed with good skin care techniques as well as typical acne treatments such as lotions. You may notice that you perceive pain or temperature differently, or that things just “feel different” when you touch them. You will probably notice skin changes within a few weeks. In these first few weeks you will notice that the odors of your sweat and urine will change, and that you may sweat more overall.

Your breasts will not change much during transition, though you may notice some breast pain, or a slight decrease in size. For this reason, many breast surgeons recommend waiting for at least six months after beginning testosterone therapy before having any type of chest surgery.

Weight will begin to redistribute around your body. Fat will diminish somewhat around your hips and thighs, and the fat under your skin throughout your body will become a bit thinner, giving your arms and legs more muscle definition and a slightly rougher appearance. Testosterone may cause you to gain fat around your abdomen (i.e., your gut/belly/stomach). Your muscle mass may increase significantly, as will your strength. However, in order to maximize your

development and maintain your health you should exercise several times a week – both cardiovascular and weight training – in consultation with your medical care provider. Depending on your diet, lifestyle, genetics, and starting weight and muscle mass, you may gain or lose weight once you begin hormone therapy.

The fat under the skin in your face will decrease and shift around to give your eyes and face in general a more angular, masculine appearance. Please note that your bone structure will likely not change, though some people in their late teens or early twenties may see some subtle bone changes. The facial changes can take up to 2 years or more to show the final result.

The hair on your body, such as your chest, back and arms, will increase in thickness, become darker and will grow at a faster rate. You may expect to develop a pattern of body hair similar to other men in your family. However, again please remember that everyone is different, and that it can take up to 5 years or longer to see the final results. Most trans men notice some degree of frontal scalp balding, mostly in the area of their temples. Depending on your age and family history, you may develop thinning or even complete hair loss in a male pattern baldness pattern.

Beards vary from person to person. Some people develop a thick beard quite rapidly; others may take several years to do so, while others may never develop a full and thick beard. This is a result of genetics and the age at which you start testosterone therapy. You might notice that cisgender men/individuals assigned male at birth also have a varying degree of facial hair thickness, and a varying age at which their beard fully developed.

2) Emotional

Your overall emotional state may or may not change; this varies from person to person. Puberty is a roller coaster of emotions, and the “second puberty” that you will experience during your transition is no exception. You may find that you have access to a narrower range of emotions or feelings, or have different interests, tastes or pastimes, or behave differently in relationships with other people. While psychotherapy is not for everyone, you may benefit from a course of supportive psychotherapy while in transition to help you explore these new thoughts and feelings, and get to know your new self.

3) Sexual

Soon after beginning hormone treatment, you will likely notice a change in your libido. Quite rapidly, your clitoris will begin to grow, and will become larger when you are aroused. You may find that there are new or different sex acts or parts of your body that bring you erotic pleasure. Your orgasms will feel different, with perhaps more peak intensity, and more focused on your genitals, as opposed to a whole body experience. It is recommended that you explore and experiment with your new sexuality through masturbation, using sex toys, and involving your sexual partner.

4) Reproductive

You may notice at first that your periods become lighter, arrive later, or are shorter in duration than previously. Some people will actually notice heavier or longer lasting periods for a few cycles before their menstrual cycles stop altogether.

Testosterone greatly reduces your ability to become pregnant. However, it does not eliminate the risk of pregnancy completely. If you are on testosterone and remaining sexually active with an individual assigned male at birth, you should always continue to use a birth control method to prevent unplanned pregnancy. If you suspect you may be pregnant, have a pregnancy test as soon as possible, so that your doctor can stop your testosterone treatment, which may be dangerous to the fetus. If you want to become pregnant, you must first stop your testosterone treatment and wait until your doctor tells you that it is okay to begin trying to conceive. Your medical provider may check your testosterone levels before clearing you to begin efforts of conception.

Testosterone therapy may change the shape of your ovaries and make it more difficult for them to release eggs. If this happens, you may need to use fertility drugs, or use techniques such as in vitro fertilization in order to become pregnant. It is possible that after taking testosterone, you may completely lose the ability to become pregnant. “Freezing” eggs is a complicated, expensive, and low success rate technique at this time. It is important for you to discuss this with your primary physician, and possibly a reproductive gynecologist, prior to starting on testosterone if you are considering trying to become pregnant in the future.

After being on testosterone for some time, you may experience a small amount of spotting or bleeding. This may occur if you miss a dose or change your dosage. You should report any bleeding or spotting to your healthcare provider; in some cases, it must be followed up with a transvaginal ultrasound and/or endometrial biopsy to be sure that you do not have a precancerous condition called hyperplasia. While there does not appear to be an increased risk of endometrial carcinoma specifically among patients on masculinizing hormone therapy, dysfunctional uterine bleeding is not uncommon. While usually related to missed doses or changes in a patient’s testosterone therapy, otherwise unexplained bleeding should be fully evaluated, especially in previously amenorrheic patients.

The risk of developing hyperplasia while taking testosterone is not clear. It is usually recommended that as long as you have a uterus, you be screened for hyperplasia once every two years, even if you have not had any bleeding. There are two ways to do this. One is to have an ultrasound performed. Another way is to take a hormone called progesterone for 10 days, after which you will have a small period. This helps to “reset” your uterus and help prevent hyperplasia. If you take 10 days of progesterone and do not have a period, you will need an ultrasound as this may indicate that hyperplasia has developed.

Your risk of cervical cancer relates to your past and current sexual practices. Please note that even people who have never had a penis in contact with their genitals may still contract HPV infections. The HPV vaccine (Gardasil) can greatly reduce your risk of cervical cancer, depending on the age at which you get the vaccine, and how many sexual partners you have had before receiving the vaccine. Pap smears are generally recommended every two years; more or less frequent pap smears may be recommended by your healthcare provider, depending on your sexual history and the results of your prior pap smears.

No recommended screening tests for ovarian cancer exist for any population. Some studies suggest an increased risk of ovarian cancer among female-to-male patients on testosterone therapy. The risk of ovarian cancer increases with age, and pelvic exams are currently the only screening modality utilized in any patient population.

The risk of breast cancer while on testosterone treatment is not significantly increased. However, there has not been enough research on this topic to be certain of the actual risk. It is still important to receive periodic mammograms or other screening procedures as recommended by your doctor. After chest reconstruction surgery, there is still a small amount of breast tissue left behind. It may be difficult to screen this small amount of tissue for breast cancer, though there are almost no cases of breast cancer in transgender men after chest reconstruction surgery.

Risks Related to Testosterone

Testosterone will change your overall health risk profile to that of a cisgender man. Your risk of heart disease, diabetes, high blood pressure, and high cholesterol may go up, though these risks may be less than the risks for an individual who is assigned male at birth or cisgender man. Since men on average live about 5 fewer years than women, you may be shortening your lifespan by several years by taking testosterone. Since you do not have a prostate, you have no risk of prostate cancer and there is no need to screen for this condition.

Testosterone can make your blood become too thick, which can cause a stroke, heart attack or other conditions. Testosterone can cause your liver to work too hard, causing damage. Your doctor will perform periodic tests of your blood count, cholesterol, kidney functions, liver functions, and a diabetes-screening test in order to closely monitor your

therapy. Testosterone levels may not need to be routinely checked; however, your doctor may choose to check them for a variety of reasons.

Some of the effects of hormone therapy are reversible if you stop taking testosterone. The degree to which the effects can be reversed depends on how long you have been taking the testosterone. Clitoral growth, facial hair growth, and male-pattern baldness are not reversible.

If you have had your ovaries removed, it is important to remain on at least a low dose of hormones post-op until at least age 50 (and perhaps beyond), to prevent a weakening of the bones, otherwise known as osteoporosis.

I have reviewed this document with my mental health provider and understand the risks and benefits related to taking masculinizing hormones. These risks include the irreversibility of some changes, even if hormone treatment is stopped. I understand that many of the long-term health impacts of gender confirming hormones are still unknown. I also understand that I should review any detailed medical concerns that I have regarding gender confirming hormones with my medical care provider.

Client Signature and Date

Provider Signature and Date

Printed Name of Client

Printed Name of Provider

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Counseling & Consultation Services, University Health Services
LGBT Campus Center, Division of Student Life
University of Wisconsin-Madison

Sources:
Center of Excellence for Transgender Health, University of California-San Francisco, transhealth.ucsf.edu
Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People,
The World Professional Association for Transgender Health, 7th Version, www.wpath.org

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