

You are considering taking testosterone, so you should learn about some of the risks, expectations, long term considerations, and medications associated with transition from female to male.

It is very important to remember that everyone is different, and that the extent of, and 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 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 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.

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 more oily. 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 technique 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 chest reconstruction 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 (otherwise known as your “gut”). Your muscle mass will increase significantly, as will your strength. However, in order to maximize your development and maintain your health you should exercise 4-5 times a week with 30 minutes/day of cardio/aerobics, as well as at least mild weight training. Depending on your diet, lifestyle, genetics, and starting weight and muscle mass, you may gain or lose weight once you begin HRT.

The fat under the skin in your face will decrease and shift around to give your eyes and face in general a more angular, male 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 see 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 transmen notice some degree of frontal scalp balding, mostly in the area of your 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 make 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 non-transgender men 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, most people would 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 different sex acts or different 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 involve 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 they 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 a non-transgender man, you should always continue to use a birth control method to prevent unwanted pregnancy.

It is possible for transgender men to become pregnant while on testosterone. 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 doctor 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 not yet a realistic alternative for preserving your fertility.

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 the doctor; in some cases, it must be followed up with an ultrasound to be sure that you do not have a precancerous condition called “hyperplasia”.

The risk of developing hyperplasia while taking testosterone is not clear. It is usually recommended that as long as you have a uterus, you are 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 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 the doctor, depending on your sexual history and the results of your prior pap smears.

The risk of cancer of the ovaries may be slightly increased while on testosterone treatment. Ovarian cancer is difficult to screen for, and most cases of ovarian cancer are discovered after it is too late to be treated. A pelvic examination, where your doctor uses a gloved hand to examine your vagina, uterus and ovaries is recommended every 1-2 years to help detect this condition. Many experts recommend a full hysterectomy and bilateral salpingo-oophorectomy (removal of the uterus, ovaries, and fallopian tubes) within 5-10 years of beginning testosterone treatment in order to minimize your cancer

risk.

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 breast removal 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.

Testosterone will change your overall health risk profile to that of a man. Your risk of heart disease, diabetes, high blood pressure, and high cholesterol may go up, though these risks may be less than a non-transgender man's risks. Since men on average live about 5 years less 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, and liver functions, and a diabetes screening test in order to closely monitor your therapy. Testosterone levels do not need to be routinely checked as they are expensive; 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 years old (and perhaps beyond), to prevent a weakening of the bones, otherwise known as osteoporosis.

Testosterone comes in several forms. Most transgender men begin using an injectible form of testosterone, which is safe and effective. Some men chose to begin on a lower dose and increase slowly, while others chose to begin at a standard dose. Both approaches have their pros and cons, and you can discuss this with the doctor. Testosterone levels tend to be most even when the injections are given weekly. There are also transdermal forms (patches, gels, and creams) available. Most men 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 remember that puberty can take years to develop all of its changes.

I understand the foregoing information about testosterone usage, and I hereby consent to the prescription use of testosterone.

Patient _____

Date _____

Physician _____

Date _____