

Forms of Estrogen and Androgen Blockers



ESTROGENS

Decrease testosterone production by the testicles, decrease sperm production and erectile function, and increase breast tissue.

MEDICATION OPTIONS FOR ESTROGEN

TRANSDERMAL

(medicine on the skin)

- Medicine that you put on the skin and it is absorbed through the skin, like patches, creams or gels.
- Sometimes, these medicines may be more expensive than injections. • You do not have to give yourself a shot.
- These forms of estrogen give a steady, daily amount of medication and some people feel better with a daily medicine.
- In the beginning, transdermal medications may give slower and more gradual changes than injections.
- May cause skin irritations on the part of your skin where you use them.
- Has the lowest risk of blood clots.

INJECTABLES

(injections/shots)

- Usually given as a weekly or every other week shot.
- In the beginning, injections may provide quicker effects compared to patches, gels, or creams.
- You can give yourself the injections or have someone else give them to you or come to the clinic for shots.
- Some people can have muscle soreness or pain and/or skin irritation
- The shot goes in the muscle (called intramuscular or IM) of the thigh, buttocks, or arm.
- Some people are uncomfortable with needles and prefer other options.

TABLETS

(pills)

- Taken daily or multiple times per day.
- Often the least expensive.
- Does not cause skin irritation and you do not have to give yourself a shot.
- Sometimes more nausea will occur with tablets.
- Can be swallowed or dissolved under the tongue.
- In the beginning, tablet medications may give slower and more gradual changes than injections

Risks and side effects of estrogen include: High blood pressure, blood clots (can occur in the leg, lungs, heart, or brain), liver problems, diabetes, headaches, changes in cholesterol, nausea, heart disease or heart attack, and in rare situations may worsen mood.



ANDROGEN BLOCKERS

Block the production and action of testosterone in the body, slow down growth of facial and body hair, help with growth of breast tissue.

This medication can decrease erectile function and sperm production.

The most commonly prescribed androgen blocker is spironolactone, a pill that can be taken by mouth daily.

Risks and side effects of spironolactone include: Dizziness or light headedness, urinating more often, muscle cramps, decrease in bone density. increase in the risk for kidney problems or high potassium levels in the body which can impact the function of the heart. Your care team will work with you to check blood tests and schedule regular visits to keep the risks of estrogen and/or androgen blockers as low and safe as possible.

Estrogen and Androgen Blockers

Hormones



Frequently Asked Questions

Every body is different, and the effects of hormones can vary from person to person. This guide will give you the basics about how estrogen and androgen blockers work, what the potential benefits and risks are, how to safely and effectively use these medications, and some ideas about what to expect.



What are hormones and how do they work?

Hormones are chemicals in the body that affect many of the body's functions and systems. Some hormones, like estrogen and testosterone for example, can influence what are called secondary sex characteristics, like body hair, muscle mass, breast growth, etc.



What are the benefits of taking estrogen and/or androgen blockers?

Using hormones may or may not be important for people to affirm their gender. Everyone has unique goals and some people use estrogen and/or androgen blockers for a lifetime and some people will choose to start and stop these medications. What matters most is safely providing options for you to affirm your gender identity in the ways that matter most to you. Using estrogen and/or androgen blockers to affirm gender identity can have many benefits like improved quality of life, improved mental health, and improved physical health.



How can I best take care of myself when using estrogen and androgen blockers?

Doing the best you can to take care of your body can help reduce some of the risks that can come along with taking estrogen and/or androgen blockers. Staying healthy may include a variety of things like regular physical movement and exercise, cutting down or removing smoking or tobacco, eating nutritious foods, limiting alcohol use to one drink or less per day, and getting emotional and social support when you need it.



What about fertility and future parenting?

Taking estrogen and androgen blockers may decrease your fertility, and this can be permanent even if you stop taking these medications. If you have sex with a person who can become pregnant, these medications are not birth control. Your provider can help you think about preserving fertility (sperm banking), family building/parenting, and/or birth control if needed.



What changes can I expect to see?

Everyone is different, changes you see on estrogen and androgen blockers may vary. This depends on many factors including your genes, the age at which you start taking these medications, as well as your overall health. Many people begin noticing changes within a few months of beginning these medications, but the maximum changes can take up to 5 or more years. Some of the changes are permanent and some may not be permanent. Taking higher doses of hormones often will not make changes happen more quickly and may increase risk. It is important to work with your provider to find the right dose for you. The best dose will be different from person to person.

SOME CHANGES THAT CAN HAPPEN ARE:

Breast growth

This is a permanent change that you will begin to notice within several months of beginning estrogen. You may experience tenderness in your breasts as they are developing, and for many people there is unevenness between the left and right side. The amount of growth varies from person to person, but most people can expect to develop an "A" cup or a small "B" cup bra size.

Skin changes

You may find that your skin becomes softer and drier than before. Pores will become smaller and there is less oil production.

Genital changes

Estrogen and androgen blockers can affect the ability to have an erection. Erections may be less firm and may not last as long. Most people still have sexual sensation and the ability to orgasm, but may not ejaculate. The testicles may become smaller, to less than half their original size.

Changes to body shape

You may notice changes to body shape and fat may collect more around the hips, thighs, and buttocks. You might notice that the fat under the skin of your face will increase as well. Muscle mass and strength will decrease.

Changes to body & facial hair

Body and head hair will decrease in thickness and grow at a slower rate. Facial hair may thin and grow slower but will not go away. You may choose to use electrolysis or laser treatments to help permanently remove hair from the face or body.

Mood & emotions

People often have changes to mood and emotions on estrogen. Many of these changes can be positive like improved self esteem and improved mood and relief of gender dysphoria. Sometimes mood and emotions may be like a "roller coaster." Rarely, depression and/or anxiety may worsen. Many people find that talking to a counselor, therapist or mental health provider can help in exploring new thoughts and feelings.