



## **Puberty Blockers**

Starting puberty blockers is a decision that is different for everyone. To make the most informed decision, this handout is meant to help you understand:

- What is puberty?
- What do puberty blockers do?
- What are the changes that will happen to my body?
- What are the benefits, risks, and costs involved?

### **How does puberty begin?**

Puberty is the process the goes through to become capable of making a baby (reproduction), as well as reach adult size and brain development. Puberty starts when your brain tells your pituitary gland to start releasing hormones. This happens at different ages for different people.

During this time, your body starts to increase the amount of certain puberty-related hormones (Luteinizing Hormone or LH and Follicle-Stimulating Hormone or FSH). This causes your testicles to start producing testosterone or your ovaries to start producing estrogen. These hormones do not cause acne, pubic or armpit hair- those are caused by other hormones.

#### Body changes in people with testicles (without puberty blockers):

- Testicle growth
- Penis growth
- Pubic hair
- Increased acne, armpit and facial hair
- Rapid growth (growth spurt)
- voice changes (deepens)

#### Body changes in people with ovaries (without puberty blockers):

- Breast changes and growth
- Changes in body shape, including fuller hips
- Menstrual periods start (usually more than 2 years after breast changes begin)



## **How do puberty blockers work?**

Puberty blockers (called GnRH analogues) cause your body to stop releasing puberty hormones (LH and FSH). This is like hitting a “pause button” on puberty.

## **Will puberty blockers stop all changes in my body?**

No, puberty blockers will not stop pubic or armpit hair from growing or improve acne. Puberty blockers only make a difference for the puberty changes that make you look female or male. For example, in bodies with ovaries, breast size may get smaller if they have already started to develop. In bodies with testicles, testicle size may decrease and penis growth will be halted.

## **What will happen if I start puberty blockers late in puberty?**

If puberty blockers are started late in puberty, they are not able to reverse most changes that have already happened. However, puberty blockers can stop any further puberty changes.

## **Are puberty blockers permanent?**

No, puberty blockers are not permanent. If you decide to stop puberty blockers without starting cross sex hormones, your body will start going through the puberty of your sex at birth. You can stop the puberty blockers at any time, but we will work with you on how to do that.

How long will it take them to start working? It can take several months for puberty blockers to start working. Everyone is a little different. It is hard to know exactly how quickly your body will respond. In the beginning, your body may actually show more signs of puberty, but this will lessen as you continue to take the blockers.

## **What are the different kinds of puberty blocking medicines?**

### Depo Lupron or Leuprolide

This medicine is given as an injection (shot) once every 3 months and sometimes monthly.

### Histrelin

This medicine is a little plastic rod that is placed under the skin (implant) in the upper arm. The implant works for a little more than 1 year, and sometimes up to 2 years or longer. After it stops working, it needs to be removed and replaced. This can be done in the clinic or in the operating room.



### **Are these medicines safety approved?**

We can safely and legally recommend puberty blockers for you based on our medical experience and judgement and your specific health needs. The Endocrine Society and the World Professional Association for Transgender Health support puberty blockers. The Food and Drug Administration (FDA) approves puberty blockers for children who start puberty at a very young age, but has not approved puberty blockers for transgender children.

### **Will I have pain?**

If you have pain from an injection or an implant, you can take Tylenol (acetaminophen) or Advil (ibuprofen) to help relieve the pain. Use these medicines only if recommended by your healthcare provider. Check with the healthcare provider first before taking any type of medicine. Contact QueerDoc if the pain from the injection or implant gets worse the next day or you have a rash.

### **Will the Depo Lupron or Leuprolide injection hurt?**

The injection is given in your arm, leg or bottom. The area where you get it may be sore for about 1 day after the injection. Sometimes a numbing cream (topical lidocaine) reduces pain from injections by numbing the skin before the needle stick. Ask if you are interested in using numbing cream before your injection.

### **Will the Histrelin implant hurt?**

If you get the implant inserted in a clinic, they will give you an injection to numb your upper arm before the procedure. The numbing injection can feel a little stinging or uncomfortable. If you have it done in an operating room, you will receive medicine to make you sleep (anesthesia) during the procedure. After the procedure, your arm may be sore for about 2 days where it was inserted.

### **What are the risks of puberty blockers?**

The long-term safety of puberty-blocking medicines is not completely understood. There may be long-term risks that we do not know about yet.

#### **Bone health**

Blocking puberty can make your bones weaker (lower bone density). This may get better when you stop the puberty blockers or start cross-hormone therapy. While on puberty blockers, we recommend taking calcium, vitamin D and doing bone



strength-building exercises like walking, jumping and weight lifting. We may check your bone health every 2 years while on blockers.

### **Fertility**

Taking puberty blockers should not affect your ability to have a baby in the future (fertility).

However, permanent damage to fertility is a concern for people who stay on puberty blockers and then take cross-sex hormones. Talking more about this with your healthcare providers can help you understand the potential impact on your fertility before starting any medicines.

### **How much does it cost?**

Puberty blocker medicines can be very expensive and the cost can change every year. Some insurance companies cover them. How much your insurance covers depends on your insurance plan and requires authorization from your plan. Sometimes insurance companies will only help pay for the Depo Lupron (the injection) and not Histrelin (the implant).

If you have medicine to sleep (anesthesia) to get the Histrelin implant, the cost are higher. If you have questions about coverage, you can call your insurance company. Questions you may want to ask include:

- Are these medicines covered by my insurance plan?
- What is my deductible, copay, and/or coinsurance fees? What are my out-of-pocket cost for these medications?
- Have I met my deductible this year?

For help navigating the insurance process, please contact [Ingersoll Gender Center](#):

911 E Pike St #221

Seattle, WA 98122

(206) 849-7859

[info@ingersollgendercenter.org](mailto:info@ingersollgendercenter.org)

For cash pay or uninsured people cost for the injection at a starting dose is about \$600 every 3 months when researched in June 2018 with New Era pharmacy. Ingersoll can help find financial resources as well at times.



## **Are puberty blockers right for me?**

Talk with your provider about risks and benefits of puberty blockers. You will want to have a good understanding of what to expect before you make any decisions.

Starting puberty blockers can give you time before making more permanent gender decisions, like starting hormone therapy. Puberty blockers prevent some of the masculin or feminine specific changes to the body that puberty causes. It can be distressing for gender expansive people to go through puberty. Puberty blockers can help with this distress by pushing the “pause button” on your puberty, which prevents puberty changes that do not match with your gender identity.

For some people puberty blockers may reduce the need for future surgeries or other treatments. For example, breast removal for trans masculine people, or hair removal and breast surgery for trans feminine people.

## **What about mental health therapy?**

In most case, it is helpful for you and your family to connect with a mental health provider experienced in gender identity before and during treatment. A mental health provider can help you through decisions and changes that happen as you get older and help your family learn how to support you through those changes.

Mental health providers can also help advocate for you with physicians and insurance companies for gender-related healthcare issues.

## **When should I start taking puberty blockers?**

You begin puberty blockers after your body shows the first signs of puberty. Usually this is after bodies with testicles have started to have increased testicle size and growth of the penis and bodies with ovaries have started to have breast changes (breast buds). It is not safe to start puberty blockers before puberty.

## **How will my doctor know puberty has started?**

Doctors can ask you about your body and look for the changes of puberty above on physical exam. The changes above are consistent with a stage of puberty call Tanner Stage 2. This is why it is helpful for you to have a recent physical exam with your primary care provider to which QueerDoc can refer for exam details. Sometimes doctors do blood tests to check puberty hormone levels before and after a test injection if the physical exam is inconclusive.



## **How long can I stay on puberty blockers?**

Puberty blockers are used until you decide you want to either resume the puberty process or until you are ready to start hormone therapy. Because puberty blockers can make your bones weaker over time, it is best to stop taking them after about four years.