About puberty blockers

What is puberty?

Puberty is the time when your body develops the ability to have children. It is a process, and it is different for everyone. Different people start puberty at different ages.

Puberty usually takes several years. You grow bigger and taller, and often get to your adult height. Your reproductive system develops, and your body goes through many other changes.

When puberty starts, your body begins to make more of certain hormones. Hormones are chemicals that cause changes in your body. They are responsible for the changes that happen during puberty.

Changes for people with testicles

If you are born with testicles, the changes during puberty include:

- Testicles growing larger. This helps your body make more of the hormone called testosterone.
- Penis growing larger
- Hair growing on your face, around the penis and testicles, in the armpits, and elsewhere
- Acne (pimples or zits)
- Growing taller and bigger in general
- Getting a deeper voice and a visible lump on your neck, called the Adam’s apple

Changes for people with ovaries

If you are born with ovaries, the changes during puberty include:

- Developing breasts
- Getting wider hips and often a smaller waist, or a “curvier” shape
- Starting your menstrual period. This usually happens two years after you start to develop breasts.

What are puberty blockers?

Puberty blockers are medications to stop changes from the puberty you were born with. These changes make you look physically male or female. For example, they can make your breasts, testicles and penises stop growing larger. Testicles might get smaller.
Puberty blockers do not stop all the changes of puberty. For example, they do not help acne or stop armpit hair from growing. They also will not reverse changes that already happened. If you start taking them late in puberty, the earlier changes will not disappear. But the medications can keep further changes from happening.

**Puberty from gender affirming hormones**

If you take gender affirming hormone medications, you will receive hormones for the gender you identify with. You will go through puberty related to the gender you identify with. The puberty blockers only block changes that do not match your gender identity.

**Why take puberty blockers?**

Going through puberty that does not match your gender identity may cause stress and concern. This can be severe for some people. Taking puberty blockers can stop the process. This can give you time to think about making more permanent decisions about your body. We sometimes say that taking these medications is like “pushing the pause button on puberty.”

If you use puberty blockers early in puberty, you may need less treatment or surgery later. For example, if puberty blockers keep your breasts from developing, you would not need surgery to remove them later.

**When to start taking puberty blockers**

Your body needs to start puberty before you can start taking medications to block it. They will not work before then. For bodies with testicles, this is when your testicles start getting larger and your penis grows. For bodies with ovaries, this is when you start to develop breasts.

Your doctor might want to check that puberty has started. To do this, they might examine you and do a blood test to measure your hormone levels.

**How fast do puberty blockers start working?**

It can take several months. How fast they work depends on you and your body.

You might actually see more signs of puberty at first. For example, if you have ovaries, you might have a period shortly after starting to take puberty blockers. But the changes of puberty should slow down or stop within a month.

**Do puberty blockers cause permanent changes?**

Puberty blockers do not cause permanent changes to the body. And you can stop taking them at any time. If you decide to stop taking puberty blockers and did not take hormone therapy, your body will go back to the puberty that had already started.

Hormone therapy is medication a doctor prescribes for you. You may take it to feel like yourself by having the puberty that matches your gender identity. For example, if you were born with ovaries, you might take testosterone. If you were born with testicles, you might take estrogen.
What are the most common puberty blockers?

Doctors prescribe three main puberty blockers. Two are given as an injection (shot). One is an implant that stays in your arm until it is time to replace it. The chart below tells you more about each medication.

<table>
<thead>
<tr>
<th>Name</th>
<th>Brand name</th>
<th>How it’s given</th>
<th>Where you go to get it</th>
<th>How often it is given</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leuprolide, dose 11.25 mg or 22.5 mg</td>
<td>Lupron Depot</td>
<td>Shot</td>
<td>Doctor’s office</td>
<td>Every 3 months</td>
</tr>
<tr>
<td>Histrelin acetate</td>
<td>Supprelin LA, Vantas</td>
<td>Implant in your arm</td>
<td>Gender Clinic</td>
<td>Every one to two years</td>
</tr>
</tbody>
</table>

Important information to know

There are 2 brands of the histrelin acetate implant.

- Supprelin LA is approved to treat children who start puberty early (precocious puberty).
- Vantas is approved for adults who have an adult medical condition. It is much less expensive than Supprelin LA, and it works just as well.

None of the puberty blocker medications are approved by the Food and Drug Administration to take for gender dysphoria (dis-FOR-ee-uh), but they are still very commonly used to treat it.

Does the treatment hurt?

You might feel some pain when you get an injection (shot). But we will work with you to make the shots as painless as possible.

- You get the shot in your arm, leg or bottom (buttock). The area may be sore for about a day afterwards. We can put numbing cream on your skin before we give the shot. Please let us know if you want this.
- The implant goes inside your inner upper arm. We use a small needle to numb the area before we put the implant in. We also have health care team members who can give you medicine to make you sleepy or lower your anxiety when you get the implant.

You may take acetaminophen (Tylenol, other brands) or ibuprofen (Motrin, Advil, other brands) to treat pain from shots or implants.

If you have more pain the day after you get your puberty blocker, please call the OHSU Doernbecher Gender Clinic. Also call us if you notice swelling or redness in the shot or implant area.

What are the possible risks of puberty blockers?

The U.S. Food and Drug Administration approved puberty blockers in 1993. They were originally approved to temporarily stop puberty in children who were going through it too early.

Researchers have not finished studying how safe puberty blockers are in the long term. So, there might be some risks that doctors do not yet know about. The information below tells you what we do know.
Bone health

Using puberty blockers can make your bones weaker while you are taking them. The medical term for this is "decreased bone density." Your bones may get stronger when you stop taking puberty blockers or start taking hormone therapy.

We recommend you do the following things to keep your bones as healthy as possible.

- Take a calcium supplement
- Take a Vitamin D supplement
- Do exercise that makes your bones stronger, such as walking, jumping and weight lifting.

Your doctor might check your bone density before you start taking puberty blockers. You might also need it checked while you are taking them.

Because blocking puberty hormones can weaken your bones, it is best to take them for just 2 to 3 years.

Fertility

Taking puberty blockers alone should not affect your ability to have a baby in the future. However, taking estrogen or testosterone can affect it. Talk with your doctor about your options for having a baby in the future, before you start taking any medication.

Mental health

Puberty blockers can affect your mental health. This is different for different people. You might have less energy if you just started taking puberty blockers. Or you might feel more depressed if you were depressed before. These problems usually get better after a few weeks. Talk with your doctor if you have any concerns.

It can help to work with a therapist who is experienced with gender identity. They can:

- Help you make decisions about your gender transition
- Help you understand how your decisions affect your goals for your body
- Watch for signs of depression, and treat it if needed
- Help you and your family support each other
- Support you when you make changes, such as changing your name, talking with your school, or changing gender
- Write letters to doctors and insurance companies about your needs for care

Costs and insurance for puberty blockers

Not all insurance companies pay for puberty blockers. What your insurance pays for, and how much, usually depends on your plan. The insurance company will need to give permission for the treatment before they will pay for it. It is a good idea to ask the insurance company what they pay for and what you need to pay for on your own.

Also check with your insurance company about pharmacy benefits. The pharmacy benefit is what your insurance company will pay for medications. You might be able to get at least one medicine, Lupron Depot, paid for with pharmacy benefits. If this does not work, we can give it to you at the OHSU Doernbecher Gender Clinic and bill your medical insurance.
Ask your insurance plan for to tell you the amounts of your co-pay and deductible for the puberty blocker you choose. A co-pay is the amount you must pay each time you get a medication or treatment. A deductible is the amount you must pay each year before the insurance company pays anything.

Your insurance company might ask you for a “billing code.” Here are some common codes you might need.

**Lupron Depot**
- Medication code – J1950 for the medication Lupron Depot
- Procedure code – CPT 96372 for the injection (shot)
- Diagnosis code – ICD-10, F64.2 Gender dysphoria in a pediatric patient

**Histrelin acetate 50 mg implant**
- Vantas
  - Medication code: J9225
- Supprelin LA
  - Medication code: J9226
- Procedure code for both: 11981 (implant placement, done in clinic)
- Diagnosis code: ICD-10 F64.2 Gender dysphoria in pediatric patient

Keep records of communications with insurance companies, when possible. Having a letter or form from your insurance company saying the treatment is approved is much better than just having someone say it on the phone.

**Is financial help available?**

Many people want help paying for puberty blockers. These medications are very expensive. Even if your insurance pays for them, you might need help paying your deductible and co-pays.

If you have trouble getting cost information from your insurance company, you can ask the OHSU patient estimates team for help looking up your plan. You can call them at 503-494-3508. Make sure to let them know you are calling about a medical benefit. Otherwise, they might have you talk to the pharmacy instead.

Finally, OHSU has a financial assistance program. It can help you afford treatment if your insurance does not pay.

**If you have questions**

<table>
<thead>
<tr>
<th>If you need to do this …</th>
<th>Please contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make an appointment, ask a medical question, get a referral to another clinic or specialist or get a medication refill</td>
<td>Call 503-418-5710 or contact us through MyChart</td>
</tr>
<tr>
<td>Contact our psychologist</td>
<td>Call 503-494-6337 or contact them through MyChart</td>
</tr>
<tr>
<td>Get a referral to a community organization or support group</td>
<td>Call 503-494-7970 or contact us through MyChart</td>
</tr>
<tr>
<td>Contact our social worker</td>
<td>Call 503-484-7970 or contact them through MyChart</td>
</tr>
<tr>
<td>Learn more about the OHSU Transgender Health Program</td>
<td>Go to <a href="http://www.ohsu.edu/transgender-health">www.ohsu.edu/transgender-health</a></td>
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