



Precocious Puberty and Spina Bifida

December 2024

Early Puberty

Children with Spina Bifida and hydrocephalus may start puberty earlier than other kids their age.

What Is Puberty?

Puberty is when a child's body starts to change and grow into an adult body. These changes help the body get ready to be able to have children in the future.

Puberty usually starts between ages 8 and 12 for girls, and between 9 and 14 for boys.

Special chemicals in the brain called hormones help start puberty. These hormones tell the body to make other hormones like estrogen (in girls) and testosterone (in boys), which cause the body to grow and change.

What Are the Stages of Puberty in Girls?

Doctors use something called "Tanner Stages" to describe the changes that happen during puberty. Stage 1 is before puberty starts, and Stage 5 is when the body is fully grown.

Here is the usual order of changes in girls:

- Breasts begin to grow
- Hips get wider and the body grows taller (called a growth spurt, which lasts about 4 years)
- Pubic hair starts to grow (about 3 to 6 months after breasts start to grow)
- Hair grows under the arms and on other parts of the body
- The first period usually happens about 2 to 2½ years after breast growth begins
- Body odor may change

Girls usually start breast development around ages 9 to 10. African-American girls may start earlier than Caucasian girls. In some studies, African-American girls started breast development about one year earlier.

It usually takes at least 3 years for breasts to fully develop. If major breast growth starts before age 8, it is considered early. (Sometimes girls have some breast growth without other changes. This is usually normal.)



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What Are the Stages of Puberty in Boys?

Here is the usual order of changes in boys during puberty:

- The testicles get bigger
- The body starts a growth spurt (grows taller quickly)
- The penis gets bigger
- Pubic hair starts to grow
- Hair grows on other parts of the body, like under the arms and on the face

If boys start having major body changes before age 9, it is called early puberty. Early puberty in boys or girls is called **Precocious Puberty**.

What Is Precocious Puberty?

Precocious puberty means that a child starts going through puberty earlier than normal.

Early puberty can cause some problems. When puberty starts early, the bones grow quickly at first, but then stop growing too soon. This means the child may end up shorter than they would have been if puberty started later.

Another problem is that a child's body starts changing before other kids the same age. This can make them feel different. They might get teased. For example, girls who grow breasts early might get unwanted attention or feel uncomfortable. Boys who start puberty early might act more aggressive or feel pressure to act older.

Kids who go through early puberty might feel left out or misunderstood. Adults may expect them to behave like older kids, even though they are not ready. For kids with Spina Bifida, early puberty can make daily life even harder.

Why Do Kids with Spina Bifida and Hydrocephalus Start Puberty Earlier?

Doctors aren't exactly sure why kids—especially girls—with Spina Bifida and hydrocephalus often start puberty early. Many believe that hydrocephalus affects the brain in a way that changes when "puberty hormones" are sent into the body.



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What Should I Do If My Child Shows Signs of Early Puberty?

If your child starts puberty early, goes through the steps in a different order, or develops very quickly, you should talk to your child's doctor. The doctor may refer you to a specialist called an **endocrinologist**, who helps with hormone problems.

If no other health problems are found, the most common treatment is to **delay puberty**. This is done with special hormone medicine that can pause puberty. It usually starts working after 3 to 6 months and may even reverse some of the changes.

One common medicine is called **Lupron**, which stops the body from making the hormones that cause early puberty. Most children see good results after a year of taking it, and it is generally safe. However, all medicines can have side effects, so it's important to talk to your doctor about the risks and benefits.

Why Is Delaying Puberty Helpful for My Child?

Delaying puberty can help children grow taller than they would if puberty started too early.

Even more important, it gives kids (and parents) more time to get used to the changes in their bodies and feelings. This can help children feel more comfortable and confident as they grow up.

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This information does not constitute medical advice for any individual. As specific cases may vary from the general information presented here, SBA advises readers to consult a qualified medical or other professional on an individual basis.