### **Questions You May Have**

It is normal to feel confused and anxious when your child goes through puberty earlier than expected. Below are some suggestions to common questions:

**Q:** How do I explain it to my child and others? Do I need to tell my relatives, teachers, or my child's siblings?

**A:** When explaining it to your child, choose words that he or she will understand. Children need to know that the differences in their body are normal changes that have started earlier than for others. It may be good to tell others that are around your child often, like the babysitter. You do not have to let everyone know—it is about what you are comfortable with and who you prefer to tell.

**Q:** Should I treat my child differently now that he or she is growing up and looks more mature?

**A:** The child who starts puberty early is not actually as old as he or she may look. Do not expect more mature behaviour because your child looks older. Children should be treated according to their actual age.

**Q:** *Is it okay to shave my child's underarm and pubic hair?* 

A: Shaving is okay if that is acceptable for you or your child and makes your child feel less anxious (for example, in the change room after swimming lessons or gymnastics). Or, you may suggest that your child change in a private room or wear a suit that has sleeves on it (like a scuba suit or sleeved leotards).

**Q:** My child is having issues with body odour. Is it okay for children to use deodorant or anti-perspirants?

**A:** Yes, deodorants can be used to help control the body odour. Use non-perfumed deodorants to lessen the chance of irritation or allergies. Anti-perspirants are not recommended.

**Q:** Will my child become more interested in the opposite sex?

**A:** The research shows that interest in the opposite sex tends to have to do with your child's actual age rather than the changes that happen with puberty.

**Q:** *Does precocious puberty run in families?* 

A: No. Precocious puberty does not run in families.

**Q:** *Did I cause this to happen?* 

**A:** No. Nothing you did or should have done caused this to happen.

**Q:** Will my child start puberty when the treatment is finished?

**A:** Once treatment is stopped, puberty will restart as expected.

#### **Websites and Resources**

Ask your endocrine nurse if you would like a list of websites or other resources.

Thank you to Anju Caude, U of C Nursing Student, for her contribution.

health information

# Central Precocious Puberty

#### What is central precocious puberty?

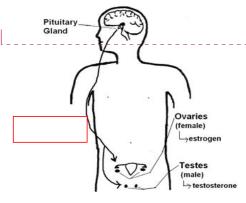
Precocious puberty is when a child shows the signs of puberty earlier than expected. This is because the brain released the puberty hormones too early. Most girls begin puberty between the ages of 8 and 13 years. Most boys begin puberty between 9 and 14 years.

Precocious puberty is seen in about 1 out of every 2000 to 5000 children. It is more common in girls than boys. Some children may have normal early puberty. They are sometimes called "early bloomers". They do not need medical treatment.

#### What is puberty and how does it happen?

Puberty is the transition time from childhood to adulthood when our bodies change, we get taller, grow hair in different places, and our thoughts and feelings begin to change.

The pituitary gland in the brain releases hormones that tell the testes in the male to produce testosterone and the ovaries in the female to produce estrogen (see below). These hormones are responsible for the changes seen in puberty.



#### What are the signs of puberty?

#### **Physical Changes:**

- · pimples or acne
- hair on the face (boys), under the arms, and in the pubic area
- sweat more and have body odour
- grow taller quickly (growth spurt)
- girls start to grow breasts
- girls may have bleeding from the vagina
- the penis and testes get larger in boys

#### **Behavioural Changes:**

- children may become self-conscious about their bodies
- girls may become moody
- boys may become more aggressive

#### What causes central precocious puberty?

It may be caused by head injury, problems with the pituitary gland, or rare genetic conditions. Most of the time, the cause is **not known**.

# Why is central precocious puberty a concern?

Higher levels of testosterone and estrogen make the bones mature quickly. This means that the growth plates in the bones finish growing early. Children that have a growth spurt too early could end up shorter as an adult.

It can also be upsetting for children, as they may be too young to understand what is happening to their bodies.

## How is central precocious puberty diagnosed?

An endocrinologist (a doctor who specializes in the study of hormones) will order some tests. Tests may include:

- an x-ray for bone age the hand and wrist is x-rayed to compare "bone age" to "actual age"
- blood work to check hormone levels
- an MRI of the brain and the pituitary gland
- an ultrasound of the ovaries and uterus (womb) in girls

#### How is central precocious puberty treated?

Your child will be prescribed a medicine that tells the brain to stop making puberty hormones. The medicine is given by injection each month by a nurse. If injections are late or missed then the puberty changes may begin again. Treatment stops when it is time for your child to start puberty.

# What can I expect to see with treatment?

In the first 1 or 2 months after starting treatment, your child may have more signs of puberty. After this phase passes, you will see that the signs of puberty will decrease or stop.

With treatment you can expect the signs of puberty to stop or slow down.

Tell your nurse or doctor if your child has hot flashes, - - - discomfort at the injection site, or a rash. These side effects are rare.

Regular follow-ups with your doctor are important to make sure that your child is growing as expected.

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