Growth Disorders in children

Diseases of the kidneys, heart, gastrointestinal tract, lungs, bones, or other body systems may affect growth. Other symptoms or physical signs in kids with these illnesses usually give clues as to the disease causing the growth delay. However, poor growth can be the first sign of a problem in some children.

Growth disorders include:

Failure to thrive is not a specific growth disorder itself, but can be a sign of an underlying condition causing growth problems. Although it is common for newborns to lose a little weight in the first few days, failure to thrive is a condition in which some infants continue to show slower-than-expected weight gain and growth. Usually caused by inadequate nutrition or a feeding problem, it is most common in kids younger than age 3. It may also be a symptom of another problem, such as an infection, a digestive problem, child neglect, or abuse.

Endocrine diseases (diseases involving hormones, the chemical messengers of the body) involve a deficiency or excess of hormones and can be responsible for growth failure during childhood and adolescence. Growth hormone deficiency is a disorder that involves the pituitary gland (the small gland at the base of the brain that secretes several hormones, including growth hormone). A damaged or malfunctioning pituitary gland may not produce enough hormones for normal growth. Hypothyroidism is a condition in which the thyroid gland fails to make enough thyroid hormone, which is essential for normal bone growth.

Turner syndrome, one of the most common genetic growth disorders, occurs in girls and is a syndrome in which there is a missing or abnormal X chromosome. In addition to short stature, girls with Turner syndrome usually do not undergo normal sexual development because their ovaries (the sex organs that produce eggs and female hormones) fail to mature and function normally.
Diagnosing a Growth Disorder

The tests to detect a growth disorder depend on the findings at each step of evaluation. A short child who is healthy and growing at a normal rate may just be observed throughout childhood, but a child who has stopped growing or is growing more slowly than expected will often need additional testing.

The endocrinologist will look for signs of the many possible causes of short stature and growth failure. Blood tests may be done to look for hormone and chromosome abnormalities and to rule out other diseases associated with growth failure. A bone age X-ray might be done and special scans (such as an MRI) can check the pituitary gland for abnormalities.

To measure the ability of the pituitary gland to produce growth hormone, a growth hormone stimulation test may be done. This involves giving the child medications that cause the pituitary gland to secrete growth hormone, then drawing several small blood samples over time to check growth hormone levels.

Treating a Growth Disorder

Although the treatment of a growth problem usually is not urgent or a medical emergency, earlier diagnosis and treatment of can help some children increase their final height.

If an underlying medical condition is identified, specific treatment may result in improved growth. Growth failure due to hypothyroidism, for example, is usually treated with thyroid hormone replacement pills.

Growth hormone injections for children with growth hormone deficiency, Turner syndrome, and chronic kidney failure may help children reach a more normal height. Human growth hormone is generally considered safe and effective, although full treatment may take many years and not all children have a good response. The treatment can be very costly and quite beyond the reach of average families.
Helping Your Child

You can boost your child’s self-esteem by providing positive reinforcement and emphasizing other characteristics, like intelligence, personality, and talents. Try to take the focus off of height as a measure of social acceptance.

It is also important to watch for the social and emotional problems that children with growth disorders face. It is not easy being the shortest kid in the class and it is never any fun being teased. Helping your child build self-esteem and emphasizing strengths — regardless of how tall he or she may grow. Children who are very self-conscious about their size may need some additional help in coping. In some cases, evaluation and treatment by a mental health professional may be needed.