

Hemihypertrophy

BIRTH DEFECT RESEARCH FOR CHILDREN



What is Hemihypertrophy?

Hemihypertrophy is characterized by a greater than normal (5%) difference in size between the right and left sides of the body. The difference can be in only one finger, one limb, half the face, or an entire half of the body, including the tongue and the internal organs, or any variation in between.



Hemihypertrophy



Hemihypertrophy may also involve other differences. The skin is often thicker and there may be acne on only one side of the face. More hair may grow on the larger side of the head. In rare cases, children can have crossed hemihypertrophy, where one leg and the opposite arm are larger than their partners.

What causes Hemihypertrophy?

The cause is not known. A few familial cases have been reported and some cases have involved chromosomal abnormalities, but most cases are sporadic. There are many theories about the cause of hemihypertrophy including increased blood flow; decreased lymph drainage; nerve or hormone abnormalities.

How often does Hemihypertrophy occur?

Hemihypertrophy is thought to occur in approximately 1 in 14,000 children.

When is hemihypertrophy usually detected?

Ordinarily the condition is detected soon after birth, but the severity may increase or decrease with advancing age.

What problems are associated with Hemihypertrophy?

Hemihypertrophy is a warning to be on the lookout for several kinds of cancers. Children with this condition have a much higher incidence of certain abdominal cancers including Wilm's tumor of the kidney and hepatoblastoma (liver cancer). In a recent study, 168 children with hemihypertrophy were monitored and just under 6% developed childhood tumors.

Since some children with hemihypertrophy also have other genetic conditions, evaluation by a geneticist is recommended. Inguinal hernias, undescended testicles, and unusual kidneys are more common in children with hemihypertrophy. Mental retardation occurs in some cases.

What treatments are suggested?

Because of the increased risk of cancer, some doctors recommend that children with hemihypertrophy receive an abdominal ultrasound screening every three months until age seven. Other physicians believe that this is not cost-effective since most children do not develop these tumors.

Another concern involves the orthopedic problems that result from any differences in leg length. Unequal leg length may cause some walking difficulties. Over time, scoliosis (curvature of the spine) may develop. This usually disappears when the leg lengths are equalized with surgery or special shoes. Children with hemihypertrophy of the limbs should receive periodic evaluations by a skilled orthopedic doctor.

Plastic surgery is sometimes recommended to correct facial differences. A craniofacial team can use computerized tomography (CT) scans and other new computer technology to plan the repair for the best possible outcome.

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