

## CHILDHOOD CANCER

Every day across the globe 32 children are born with a syndrome that will increase their risk of childhood cancer by 2.5 to 25 percent. It's crucial screening begins at birth but pediatricians often don't recognize the symptoms. There are several known genetic causes of Beckwith-Wiedemann syndrome and isolated hemihypertrophy, which generally result in changes in the expression of one or more of the genes at a region of chromosome 11 known as 11p15.

# BECKWITH WIEDEMANN SYNDROME





### KNOW THE SYMPTOMS

Children born with one or more symptoms should see the Genetics Team:

- · Large birth weight and length (macrosomia)
- · Overgrowth of one side or one part of the body (hemihypertrophy/hemihyperplasia)
- An enlarged tongue (macroglossia).
- · Low levels of sugar in bloodstream (hypoglycemia) during the newborn period and sometimes prolonged hypoglycemia (due to hyperinsulinism).
- · Defects in the abdominal wall (such as umbilical hernia or an omphalocele)
- · Enlarged abdominal organs, such as the kidneys, liver and pancreas.
- Pits or creases in the earlobe or behind the ear.
- · Naevus flammeus stork bite mark over eyelids and forehead.



High birth weight, macroglossia, omphalocele, neonatal hypoglycemia, birth marks, ear creases and pits, or hemihypertrophy may be obvious at birth.

**Birth** 



If heminyperplasia is present, parent should consult with orthopedist. BWS children tend to continue to be large for age. AFP testing can stop at child's 4th birthday due to reduced risk of hepatoblastoma.



Cancer screening is discontinued. Manage leg length discrepancy, kidney issues, and other concerns as directed by a specialist. Long-term prognosis is good.

8-adult

#### **Prenatal**

Signs of BWS can be omphalocele, enlarged kidney(s), polyhydramnios, and large for gestational age. Genetic testing may be ordered if these signs or family history is present.



Greatest risk for developing cancer, so it is especially important to follow cancer screening guidelines. Parent may also notice hemihyperplasia that may not have been apparent at birth. Tongue reduction surgery, when needed, is often done before age 2.

0-2



Continue abdominal ultrasounds every 3 months until child's 8th birthday. Growth often becomes more typical around age 8.

4-8



Timeline for a Typical Child with BWS



#### LEARN MORE & RAISE AWARENESS

- Ensure children receive the proper protocol for cancer screening: A minimum of quarterly AFP levels until age 4 and quarterly abdominal ultrasounds until age 8
- Follow HowBigBWS on Instagram, Facebook & Twitter and share posts
- Join the BWS Registry; bws@chop.edu
- Find a support group: www.beckwithwiedemann.org
- Medical professionals can learn more by contacting Dr. Jenn Kalish at Children's Hospital of Philadelphia