Journalof Genetic Disorders & Genetic Reports

Editorial

A SCITECHNOL JOURNAL

Congenital anomalies

Cristina Boston

Department of Biology, Texas Metropolitan Geriatric Medical Center, Texas

***Corresponding Author:** Cristina Boston, Department of Biology, Texas Metropolitan Geriatric Medical Center, Texas, **E- mail:** CristinaBos@uw.com

Received Date: April 3, 2021**, Accepted Date:** April 15, 2021,
Published Date: April 28, 2021

Most babies are born healthy, but when a baby features a condition that's present from birth, it's called a birth defect. Congenital disorders are often inherited or caused by environmental factors and their impact on a child's health and development can vary from mild to severe. a toddler with a birth defect may experience a disability or health problems throughout life.

Causes and risk factors

Although approximately 50% of all congenital anomalies can't be linked to a selected cause, there are some known genetic, environmental and other causes or risk factors.

Genetic factors

Genes play a crucial role in many congenital anomalies. This could be through inherited genes that code for an anomaly or resulting from sudden changes in genes referred to as mutations. Consanguinity (when parents are related by blood) also increases the prevalence of rare genetic congenital anomalies and nearly doubles the danger for neonatal and childhood death, intellectual disability, and other anomalies. Some ethnic communities (such as Ashkenazi Jews or Finns) have a relatively high prevalence of rare genetic mutations like CF and Haemophilia C

Socioeconomic and demographic factors

Low-income could also be an indirect determinant of congenital anomalies, with a better frequency among resource-constrained families and countries. it's estimated that about 94% of severe congenital anomalies occur in low- and middle-income countries. An indirect determinant, this higher risk relates to a possible lack of access to sufficient, nutritious foods by pregnant women, an increased exposure to agents or factors like infection and alcohol, or poorer access to healthcare and screening. Factors often related to lower-income may induce or increase the incidence of abnormal prenatal development. Maternal age is additionally a risk factor for abnormal intrauterine fetal development. Advanced maternal age increases the danger of chromosomal abnormalities, including mongolism.

Environmental factors

Maternal exposure to certain pesticides and other chemicals, also as certain medications, alcohol, tobacco and radiation during pregnancy, may increase the danger of getting a fetus or neonate suffering from congenital anomalies. Working or living near, or in, waste sites, smelters or mines can also be a risk factor, particularly if the mother is exposed to other environmental risk factors or nutritional deficiencies.

Infections

Maternal infections like syphilis and rubella are a big explanation for congenital anomalies in low- and middle-income countries. Zika viral infection during pregnancy may be a explanation for microcephaly and other congenital abnormalities within the developing fetus and newborn. Zika infection in pregnancy also leads to pregnancy complications like fetal loss, stillbirth, and preterm birth.

.

Testing for congenital disorders

Testing for congenital disorders are often performed from 10 weeks of pregnancy onwards. While many parents prefer to have tests during pregnancy, it's not compulsory and a few don't . Screening tests are designed to spot babies who don't have a birth defect . If a screening test doesn't rule out your baby having a birth defect , subsequent step is to possess a diagnostic assay .Diagnostic tests, like ultrasound scans, blood tests, and sometimes urine tests, are designed to spot babies who do have a birth defect , and to seek out what that disorder is.However, it's impossible to check for all congenital disorders during pregnancy, and testing isn't perfect.

Preventing congenital disorders

If you've got a private or case history of a specific birth defect, you'll have genetic tests before you become pregnant. You'll wish to satisfy with a genetic counselor to debate your case history and therefore the likelihood your baby will have any congenital disorders and possibly plan to undergo genetic testing. for folks undergoing in-vitro fertilization (IVF) treatment, your embryo are often tested at 2 to 4 days old, before it's implanted into your uterus.

Other belongings you can do to undertake to stop congenital disorders include:

- eating a healthy diet with enough vitamins and minerals, especially vitamin Bc , during the reproductive years
- taking vitamin Bc tablets even before you become pregnant and for the primary trimester of pregnancy
- avoiding alcohol, smoking and other drugs as these can harm your unborn fetus
- controlling diabetes and gestational diabetes
- avoiding exposure to environmental chemicals, like pesticides or lead
- being vaccinated, especially against rubella

.