

Causes and Symptoms of Microcephaly

Nada Sindicic Dessardo*

Specialist in Pediatrics, University of Rijeka, Switzerland

Letter

Microcephaly (from New Latin *microcephalia*, from Ancient Greek *mikrós* “small” and *kephalé* “head”) is a medical condition involving a lower-than-normal head. Microcephaly may be present at birth or it may develop in the first many times of life. Since brain growth is identified with head growth, people with this complaint frequently have an intellectual disability, poor motor function, poor speech, abnormal facial features, seizures and dwarfism.

The complaint is caused by a dislocation to the inheritable processes that form the brain beforehand in gestation, though the cause isn't linked in utmost cases. Many inheritable runs can affect in microcephaly, including chromosomal and single-gene conditions, though nearly always in combination with other symptoms. Mutations that affect solely in microcephaly (primary microcephaly) live but are less common. External poisons to the embryo, similar as alcohol during gestation or vertically transmitted infections, can also affect in microcephaly. Microcephaly serves as an important neurological suggestion or warning sign, but no uniformity exists in its description. It's generally defined as a Head Circumference (HC) further than two standard diversions below the mean for age and coitus. Some academics endorse defining it as head circumference further than three standard diversions below the mean for the age and coitus [1].

There's no specific treatment that returns the head size to normal. In general, life expectation for individualities with microcephaly is reduced, and the prognostic for normal brain function is poor. Occasional cases develop normal intelligence and grow typically (piecemeal from persistently small head circumference). It's reported that in the United States, microcephaly occurs in 2 to 12 babies per births [2].

Symptoms

The primary sign of microcephaly is head size significantly lower than that of other children of the same age and coitus. Head size is measured as the distance around the top of the child's head (circumference). Using standardized growth maps, the dimension is compared with other children's measures in percentiles. Some children just have small heads, whose dimension falls as low as the first percentile. In children with microcephaly, head size measures significantly below average, conceivably indeed below the first percentile for your baby's age and coitus. A child with more severe microcephaly may also have a backward-leaning forepart [3].

Causes

Microcephaly generally is the result of abnormal brain development, which can do in the womb (natural) or during immaturity. Microcephaly may be inheritable. Other causes may include

Craniosynostosis: The unseasonable fusing of the joints (sutures) between the bony plates that form an child's cranium keeps the brain from growing. Treating craniosynostosis generally means your child needs surgery to separate the fused bones. However, this surgery allows the brain acceptable space to grow and develop, if there are no beginning problems in the brain [4].

Chromosomal abnormalities: Down pattern and other conditions may affect in microcephaly.

Dropped oxygen to the fetal brain (cerebral anoxia). Certain complications of gestation or delivery can vitiate oxygen delivery to the fetal brain. Infections passed to the fetus during gestation. These include toxoplasmosis, cytomegalovirus, German measles (rubella), Chicken pox (*varicella*) and Zika contagion. Exposure to medicines, alcohol or certain poisonous chemicals in the womb. Any of these put your baby at threat of brain abnormalities [5].

Severe malnutrition: Not getting acceptable nutrition during gestation can affect your baby's development.

Unbridled phenylketonuria also known as PKU, in the mama. PKU is a birth disfigurement that hampers the body's capability to break down the amino acid phenylalanine.

Acknowledgement

I would like to thank my Professor for his support and encouragement.

Conflict of Interests

The authors declare that they are no conflict of interest.

References

1. Dumas L, Sikela JM (2009) “DUF1220 domains, cognitive disease, and human brain evolution”. *Cold Spring Harb Symp Quant Biol* 74: 375-382.
2. Rimol, Lars M, Agartz, Ingrid, Djurovic, et al. (2010) “Sex-dependent association of common variants of microcephaly genes with brain structure”. *Proc Natl Acad Sci* 107: 384-388.
3. Rasmussen, Sonja A, Jamieson, Denise J, Honein, et al. (2016) “Zika Virus and Birth Defects Reviewing the Evidence for Causality”. *N Engl J Med* 374: 1981-1987.
4. Mlakar, Jernej, Korva, Misa, Tul, et al. (2016) “Zika Virus Associated with Microcephaly”. *N Engl J Med* 374: 951-958.
5. Burrow, Gerard N, Hamilton, Howard B, Zdenek H (1964) “Study of Adolescents Exposed in Utero to the Atomic Bomb, Nagasaki, Japan”. *Yale J Biol Med* 36: 430-444.

*Corresponding author: Nada Sindicic Dessardo, Specialist in Pediatrics, University of Rijeka, Switzerland, E-mail: elizabeth.ml@hotmail.com

Received: 5-Apr-2022, Manuscript No: nnp-22-61225, **Editor assigned:** 6-Apr-2022, Pre QC No: nnp-22-61225 (PQ), **Reviewed:** 12-Apr-2022, QC No: nnp-22-61225, **Revised:** 15-Apr-2022, Manuscript No: nnp-22-61225(R), **Published:** 22-Apr-2022, DOI: 10.4172/2572-4983.1000236

Citation: Dessardo NS (2022) Causes and Symptoms of Microcephaly. *Neonatal and Pediatric Medicine* 8: 236.

Copyright: © 2022 Dessardo NS. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.