



Empowering Children. Supporting Families. Building Brighter Futures.

Resource 062 | Brain, spinal cord, and seizure conditions

Microcephaly

What it means

Microcephaly means a child's head circumference is substantially smaller than expected for age and sex. It is a finding with many possible explanations, rather than one disease. Development ranges from relatively typical functioning to significant support needs. The head-growth pattern and associated findings help guide evaluation. [1]

Causes and risk factors

Causes include genetic conditions, congenital infections, and problems affecting brain growth before or after birth. Sometimes a smaller head occurs within a family without major developmental difficulties. Microcephaly may be present at birth or develop later. A specific cause cannot be inferred from head size alone. [1,2]

General family education. A concern deserves assessment, but this guide does not diagnose a child or prescribe treatment.



Signs and everyday impact

The main sign is a small head circumference confirmed by careful measurement. Some children also have developmental delay, seizures, movement difficulties, feeding problems, or hearing and vision differences. Other children have fewer associated concerns. Growth measurements and a child's actual skills are more informative than appearance. [1,2]

Assessment and diagnosis

A clinician checks measurement accuracy, age-appropriate growth charts, birth and medical history, family head sizes when relevant, and development. Imaging, genetic testing, infection investigations, or specialist referral are selected according to findings. Repeated measurements help distinguish a stable pattern from a change in head growth. [1,2]

Treatment and therapy

There is no single treatment that enlarges the head or addresses every cause. Care treats identified medical problems and supports development through individualized physical, occupational, and speech-language therapy, communication supports, and education. Hearing, vision, nutrition, and seizure care may be needed. Follow-up focuses on the child's functioning and health rather than head size alone. [1,2,3]

Support at home

Use enjoyable play, responsive communication, and accessible toys to support current skills. Keep a record of progress and any losses. Follow feeding and seizure plans if applicable. Ask for hearing and vision checks when concerns arise, and choose goals that improve participation in everyday routines.

When to seek help

New seizures, loss of skills, marked changes in alertness, or feeding difficulties warrant prompt assessment. Use emergency services for prolonged seizures, breathing difficulty, or unresponsiveness.

Questions for your care team

- Is the measurement pattern stable or changing?
- Which investigations could clarify the cause?
- What medical monitoring and developmental supports are appropriate?



Podcast preparation

Use this outline to develop a later podcast script.

Suggested opening

Welcome to Mariel Early Intervention. Today we discuss microcephaly. Microcephaly means a child's head circumference is substantially smaller than expected for age and sex. This is general education; each child needs individualized care.

Opening: Define the topic and its developmental context.

Understanding: Explain causes and signs without inviting self-diagnosis.

Assessment: Describe evaluation and distinguish screening from diagnosis.

Support: Discuss treatment, therapy, and practical family supports.

Closing: Explain urgent signs and one clear next step.

Misconception to address: Myth: a small head alone predicts a child's abilities. The cause and individual developmental course matter.

Before recording: update clinical references and local service details, arrange clinical review, and use fully consented or fictional examples.

Terms in plain language

- Head circumference: the measurement around the widest part of the head.
- Congenital: present at birth.
- Developmental monitoring: following a child's skills and progress over time.

Sources and further reading

Sources accessed 3 October 2026. Numbered references support the clinical overview. Treatment availability and referral routes vary by country.

[1] Microcephaly

<https://www.cdc.gov/birth-defects/about/microcephaly.html>

[2] Assessing Developmental Delays in Children

<https://www.healthychildren.org/English/ages-stages/toddler/Pages/Assessing-Developmental-Delays.aspx>

[3] Epilepsy and Seizures

<https://www.ninds.nih.gov/node/647>