

Neonatal Intensive Care Unit

Parent Information Sheet: Microcephaly

What is Microcephaly?

Microcephaly is a condition where a baby's head is much smaller than expected. During pregnancy, a baby's head grows because the baby's brain grows. Microcephaly can occur because a baby's brain has not developed properly during pregnancy or has stopped growing after birth, which results in a smaller head size. Microcephaly can be an isolated condition, meaning that it can occur with no other major birth defects, or it can occur in combination with other major birth defects.

Causes and Risk Factors:

The causes of microcephaly in most babies are unknown. Some babies have microcephaly because of changes in their genes. Other causes of microcephaly, including severe microcephaly, can include the following exposures during pregnancy:

- Certain infections during pregnancy, such as rubella, toxoplasmosis, or cytomegalovirus
- Severe malnutrition, meaning a lack of nutrients or not getting enough food
- Exposure to harmful substances, such as alcohol, certain drugs, or toxic chemicals
- Interruption of the blood supply to the baby's brain during development

Diagnosis:

A healthcare provider will measure the distance around a newborn baby's head, also called the head circumference, during a physical exam. Diagnosis of microcephaly is given if head circumference is less than the 3rd percentile.

- Consultation with specialists like a pediatric neurologist and geneticist may be needed
- Further testing and brain MRI might be indicated to try to understand the cause of microcephaly

Treatment:

- Microcephaly is a lifelong condition.
- There is no known cure or standard treatment for microcephaly but further management might be guided by the specific cause if identified
- Referral to early intervention and NICU follow up clinic might be indicated



Baby with Typical Head Size





Baby with Severe Microcephaly



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