Tip Sheets

Microcephaly (and Zika Virus)

Microcephaly is a rare medical condition in which the circumference of the head is smaller than normal because the brain has not developed properly or has stopped growing. Microcephaly can be present at birth or it may develop in the first few years of life. The condition is usually the result of the brain developing abnormally in the womb or not growing as it should after birth.

Common Facts about Microcephaly

- Microcephaly can be caused by a variety of genetic or environmental factors
- It is neurological.
- Children with microcephaly often have developmental issues in addition to physical symptoms.
- Children with microcephaly may have cognitive impairments, delayed motor function or speech delays.
- Children with microcephaly may also have seizures and attention issues.
- Some children with microcephaly have normal intelligence and will show some head growth.
- Microcephaly from the Zika virus has been found to have a more severe impact on children.

Causes of Microcephaly

- Babies may also be born with microcephaly if, during pregnancy, their mother abused drugs or alcohol
- The fetus became infected with a cytomegalovirus, rubella (German measles), varicella (chicken pox) virus, or possibly Zika virus
- An unborn infant was exposed to certain toxic chemicals;
- An infant had untreated phenylketonuria (PKU, a harmful buildup of the amino acid phenylalanine in the blood)

Complications to Development in a Child with Microcephaly

Some children with microcephaly are of normal intelligence and development, even though their heads will always be small for their age and sex. But depending on the cause and severity of the microcephaly, complications may include:

- Developmental delays, such as in speech and movement
- Difficulties with coordination and balance
- Dwarfism or short stature
- Facial distortions
- Hyperactivity
- Mental retardation
- Seizures
Treatment
Early intervention is important for a child with microcephaly:
- No treatment can return a child’s head to its natural size but treatment will focus on developmental outcomes
- Interventions will include speech, occupational and physical therapies to maximize abilities
- Medication might be used to prevent seizures
- Anti-inflammatory drugs are aimed at reducing inflammation of the airways.

Additional Resources for Children with Microcephaly:

Mayo Clinic
http://www.mayoclinic.org/diseases-conditions/microcephaly/basics/definition/CON-20034823

National Institute of Neurological Disorders and Stroke
http://www.ninds.nih.gov/disorders/microcephaly/microcephaly.htm

For more information on Microcephaly, visit www.inclusivechildcare.org.

Facts about Zika Virus and Microcephaly:
- The Zika virus can cause a viral-induced brain injury
- The Zika virus can cause widespread tissue and cell death leading to brain shrinkage rather than simply impaired growth.
- The Zika virus has also lead to blindness in some of the cases.

From the Centers for Disease Control:
- Pregnant women can be infected with Zika virus.
- A pregnant woman can pass on Zika virus to her fetus.

If a pregnant woman is exposed
- We don't know how likely she is to get Zika.

If a pregnant woman is infected
- We don't know how the virus will affect her or her pregnancy.
- We don't know how likely it is that Zika will pass to her fetus.
- We don't know if the fetus is infected, if the fetus will develop birth defects.
- We don't know when in pregnancy the infection might cause harm to the fetus.
- We don't know whether her baby will have birth defects.
- We don't know if sexual transmission of Zika virus poses a different risk of birth defects than mosquito-borne transmission.