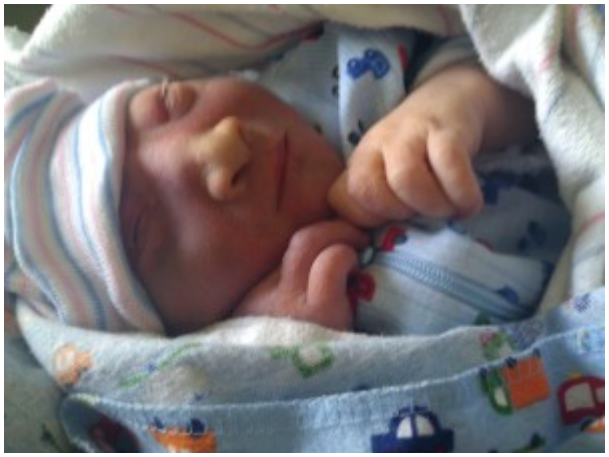
Open neural tube defects (ONTDs), which includes spina bifida and anencephaly, is a range of birth defects that can include the brain and/or spinal cord. This is generally something that happens very early in pregnancy, and can vary widely in severity and expected outcome. Although the cause of most cases of ONTDs are not known, there are a few known risks factors, such as maternal obesity, uncontrolled maternal diabetes, and exposure to certain antiseizure medications. Taking folic acid (a type of vitamin B) before and during pregnancy has been shown to reduce the risk for ONTDs during pregnancy.

ONTDs can often be diagnosed by ultrasound, but may also be identified by doing a diagnostic procedure, such as amniocentesis.

The two most common types of ONTDs are spina bifida and anencephaly. Spina bifida occurs when the bones in the spine do not fuse correctly. This can cause part of the spinal cord to bulge through the spine. There is a wide variability with spina bifida: some individuals may have a very small hole and may not even know they have it, while others can have more severe openings that cause significant medical complications. The size of the opening and where it is on the spine can sometimes give more information as to what to expect. To learn more about spina bifida, visit the Spina Bifida Association on their web site.

While spina bifida can be quite variable, anencephaly is almost always life-limiting. Anencephaly is when all or part of the brain is missing. Most babies with anencephaly do survive to delivery, and those who do often pass away shortly after birth.



Click here to learn more about scheduling a genetic counseling appointment for pregnancy-related questions.

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