

Example of term paper on spina bifida

[Health & Medicine](#), [Pregnancy](#)



Spina bifida is a neural tube defect in which the neural tube fails to close in early fetal life. It is diagnosed using fetal ultrasound and elevated α -fetoprotein levels. It can range from an entirely asymptomatic bone malformation or it can be severe and debilitating. Due to an imperfectly closed spinal column, the contents of the column spill out and this can lead to a hydrocephalus. In fact, there are three different types of spina bifida: spina bifida occulta, meningocele, and myelomeningocele.

It is the most common disabling birth defect in America. Worldwide it occurs in 1 in 1000 live births. Folic acid deficiency is implicated in the disease process and women who have had a prior complication with a neural tube defect are put on folic acid as a prophylactic measure.

A spina bifida occulta is the mildest form of the disease, where the spinal column is still able to hold the contents. Often the only sign will be a birthmark or tuft of hair on the back. A myelomeningocele results in severe deformations and late sequelae of paralysis. In the most severe forms the spinal column contents including the meninges spill out through the skin and are completely exposed. This leads to severe paralysis and dysfunction.

Organizations to encourage study of the disease include the Spina Bifida Association which can be found at <http://www.spinabifidaassociation.org>.

On their website is a treasure trove of information about the disease and various treatment options. Most treatment revolves around surgery to repair any visible defect. Furthermore the administration to the mother of 4mg/day folic acid commencing from when she begins trying to get pregnant through the first few weeks into her subsequent pregnancy is necessary.

Spina bifida is a neural tube defect in which the neural tube fails to close in

early fetal life. It is diagnosed using fetal ultrasound and elevated α -fetoprotein levels. It can range from an entirely asymptomatic bone malformation or it can be severe and debilitating including paralysis of the limbs. Due to an imperfectly closed spinal column, the contents of the column spill out and this can lead to a hydrocephalus. In fact, there are three different types of spina bifida: spina bifida occulta, meningocele, and myelomeningocele. These diseases are caused by insufficient folic acid in the maternal diet. Discovery of the disease can happen either antenatal through ultra sound and a clinical suspicion due to elevated α -fetoprotein, or it may happen immediately postpartum with the birth of the child and the direct observation of the lesion on the back. Gender does not play a part in this congenital disease.

It is the most common disabling birth defect in America. Worldwide it occurs in 1 in 1000 live births and approximately 1500 children with this disease are born every year in America. Hispanics and whites tend to have it more frequently than blacks. A spina bifida occulta is the mildest form of the disease, where the spinal column is still able to hold the contents. Often the only sign will be a birthmark or tuft of hair on the back. A myelomeningocele results in severe deformations and late sequelae of paralysis. In the most severe forms the spinal column contents including the meninges spill out through the skin and are completely exposed. This leads to severe paralysis and dysfunction.

The chief characteristic of the disease is the lack of a closed spinal column and the spilling out of the contents into the lower back. In the mildest forms of the disease, there may have been adequate bony protection present to

protect the spinal contents that the only evidence of the malformation is a tuft of hair or a birthmark on the back. In others, with worse variants of the disease such as a myelomeningocele, there may be no spinal closure at all and the entire contents of the spinal column are able to spill out and form pouches. Children with myelomeningocele will have gross abnormalities under physical observation with sacs of meninges and spinal cord spilling out of a newborn's back. They will likely be paralyzed from the point below the myelomeningocele. Thus, for some the disease will be mild with few obvious symptoms and in others it will be catastrophic and paralyzing.

Children with spina bifida can do quite well in school. Individualized Education Plans are available if the child qualifies for special education and a 504 Plan is available to those children who are not special education, but instead have some disability that must be accommodated. Therapy revolves around physical therapy and it is important with children with spina bifida to get adequate exercise each day. Those with the mildest forms will be able to live unaided lives, while those with more severe forms will require varying degrees of assistance. The most important equipment that a patient with spina bifida would need is a wheel chair. It is used to aid their mobility. It's good, because it lets them roll around where they need to go because they can't walk there..

Organizations to encourage study of the disease include the Spina Bifida Association which can be found at <http://www.spinabifidaassociation.org>. On their website is a treasure trove of information about the disease and various treatment options. Most treatment revolves around surgery to repair any visible defect. Furthermore the administration to the mother of 4mg/day

folic acid commencing from when she begins trying to get pregnant through the first few weeks into her subsequent pregnancy is necessary. Also, the CDC has a very informative website where excellent information about spina bifida is obtainable.