

# Spina bifida

## What is spina bifida?

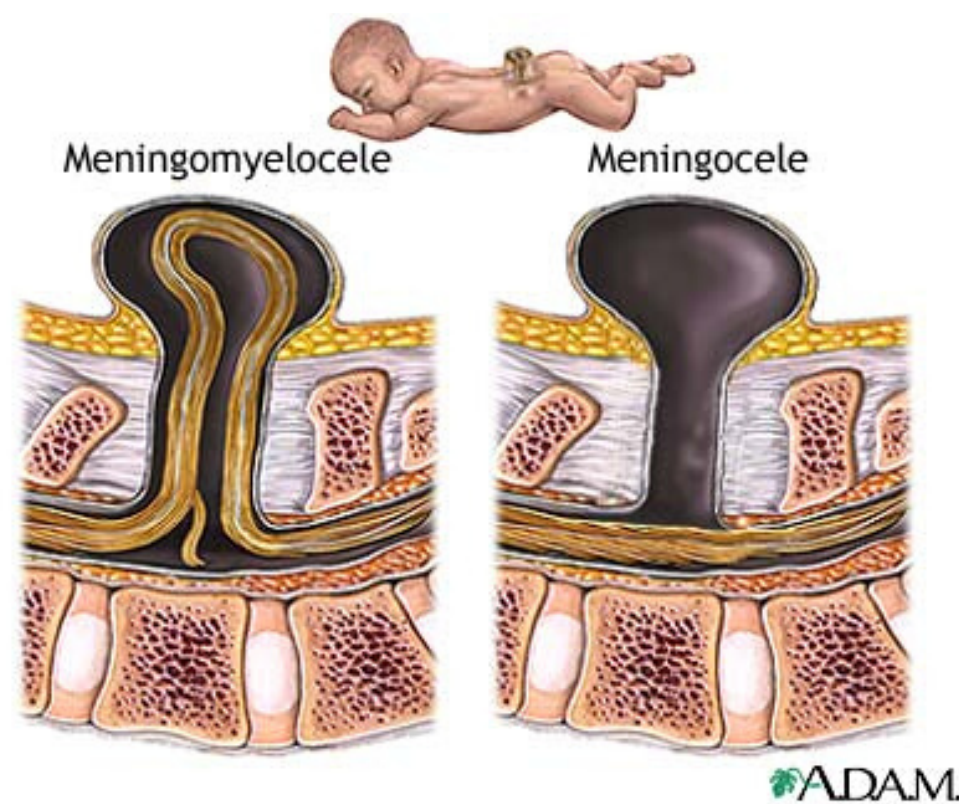
Spina Bifida is one of the most common congenital defects, occurring within the first 25 days of pregnancy, and affecting between one and three infants per thousand in most parts of the world. Spina Bifida is a neural tube defect which occurs when the neural tube does not close properly along its length so part of the meninges or spinal cord protrudes through the spinal column, often resulting in physical disability. The severity of the problems caused by spina bifida depends on the size of the lesion, its location along the spine and the extent of the damage caused to the spinal cord. It can result in lack of bladder or bowel control, paralysis of the legs and abnormal spinal curvature. More than 85 % of children with Spina Bifida also have Hydrocephalus or develop this at a later stage. It is due to an abnormality that prevents free circulation and drainage of the cerebrospinal fluid (fluid that circulates in the brain and spinal cord). As a result, the fluid accumulates and causes the head to enlarge excessively. If not treated this may cause brain damage and may lead to intellectual impairment.

## Types of Spina Bifida

There are 4 types of spina bifida : occulta, closed neural tube defects, meningocele, meningomyelocele, of which the last 2 are the most common.

### Meningomyelocele

is the most serious and more common of the two forms of cystic Spina Bifida. Here the cyst not only contains tissue and cerebro-spinal fluid but also nerves and part of the spinal cord. The spinal cord is damaged or not properly developed. As a result, there is always some paralysis and loss of sensation below the damaged region. The amount of disability depends very much on where the Spina Bifida is and the amount of nerve damage involved. Many people with this condition have bowel and bladder problems because of damage to the nerves going to the bowel or bladder from the bottom end of the spinal cord.



### Meningocele

In this form, the sac contains tissues which cover the spinal cord (meninges) and cerebro-spinal fluid. This fluid bathes and protects the brain and spinal cord. The nerves are not usually badly damaged and are able to function, therefore there is often little disability present. This is the least common form.



## What is the incidence of SB?

Spina Bifida is a result of lack of absorption of folic acid. The quality of food can have an influence on this, though other preventive measures may also be necessary. Research in many countries has shown that periconceptual folic acid intake can greatly reduce a woman's risk of having a baby with a neural tube disorder.

The incidence of neural tube disorders varies according to region, social class and population group. The incidence in South Africa is believed to be around 1 in 500 to 800 births making these conditions an important field of research. Inheritance is multifactorial which means that genes from both parents interact with some factors in the environment to cause the disorder.

## Prognosis

Spina bifida and hydrocephalus, separately or in combination, are serious impairments. Spina Bifida is a condition that cannot be cured. In most cases several surgical interventions are needed, such as the closure of the back after birth. Good medical care and intensive training can prevent many complications and improve the quality of life. Children with spina bifida can lead active lives. Most children with the disorder have normal intelligence and can walk, often with assistive devices. If learning challenges develop, appropriate educational interventions are helpful.

Source : National Institute of Neurological Disorders and Stroke USA

Contact : Association for Spina Bifida & Hydrocephalus

<https://www.asbah-sa.org/>