

Spina Bifida is a birth defect that involves the incomplete development of the spinal cord or its coverings in the first month of pregnancy. The term spina bifida comes from Latin and means 'split' or 'open' spine.

There are many different types of spina bifida. The three most common forms are;

Spina Bifida Occulta

This is the mildest form often called hidden spina bifida. There is a small defect or gap of the bones around the spinal cord (vertebrae) but the spinal cord and the nerves are usually normal and there is no opening on the back.

Sometimes there will be a dimple, hair patch or red discolouration on the skin at the point of the defect. Most children with this type never have any health problems.

Meningocele

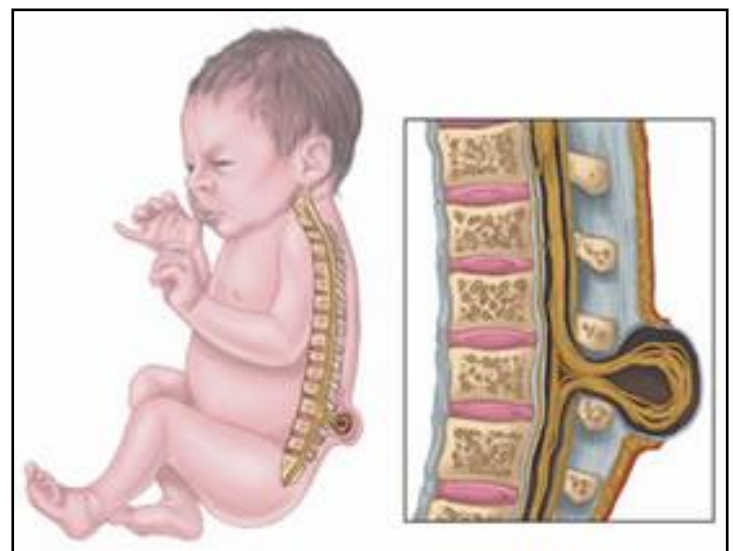
Meningocele involves the meninges, the membranes covering and protecting the brain and spinal cord. If the meninges push through the hole in the vertebrae the sack is called a meningocele. Babies usually have an operation shortly after birth to close the lesion.

Myelomeningocele

Myelomeningocele is the most severe form. It occurs when the meninges and the spinal cord push through the hole in the back. The nerves at and below the defect are damaged and babies will have some degree of paralysis and bowel and bladder complications.

Babies need surgery shortly after birth to repair the affected area. Most babies will develop hydrocephalus (an accumulation of fluid in and around the brain).

This will also require an operation to place a shunt in the brain. The shunt is a thin tube that helps to relieve pressure on the brain by draining and diverting extra fluid.



What causes Spina Bifida?

The causes of spina bifida are unknown. Maternal folic acid deficiency has been linked. It is recommended a daily intake of 0.4 mg (400 micrograms) of folic acid taken before becoming pregnant, and through the first trimester can reduce the risk of neural tube defects occurring in future pregnancies.

If your baby is diagnosed with meningocele or myelomeningocele after they are born, baby will be taken to NICU. Your baby will be nursed on their

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tummy (prone) so that the lesion is visible. To keep the sac moist it will be wrapped in gauze which has been soaked in saline.

Neurosurgery will be called to see baby and a theatre time will be set. Baby will be made nil by mouth and will receive fluids intravenously and commence on antibiotics to prevent infection.

Some babies may have difficulty passing urine and an indwelling catheter (IDC) will be inserted. Infants with myelomeningocele have an increased risk of latex sensitivity and therefore will be cared for in a latex free environment.

When baby returns from the operating theatre he/she will be on a ventilator (breathing machine) for a short time. Most babies are able to commence feeds once they are awake and ready to feed. Breastfeeding can be achieved in a side lying position. Baby will be given regularly medicine for pain relief and to help prevent infection.

The neurosurgical team will have daily involvement until time of discharge.

Infants will require multidisciplinary follow up and referrals will be made to neurosurgical services, urologists, orthopaedic surgeons, physiotherapists and your paediatrician.

