

# SPINA BIFIDA OCCULTA

## What is it?

This condition is a form of spina bifida. It is not as easily detected because skin covers the spinal deformity and any associated abnormalities of the spinal cord and its nerve roots. Spina bifida occulta can affect any level of the spine, but is usually found in the lower part of the back.

## Causes

This condition is a result of a spinal deformity and is associated with abnormal development of the spinal nerve roots and spinal cord. Like most conditions, there are different severities of spina bifida occulta:

- In the most minor form of spina bifida occulta, the plates of bone that form the spinal arch fail to fuse completely. This variation generally only affects one vertebra, particularly the vertebra lying lowest in the small of the back. Because there are no associated abnormalities of the spinal cord or nerve roots, there are no leg, bladder or bowel problems.
- In more severe cases, the bodies of several of the vertebra may be fused together. This may cause the person's back to be slightly short and often stiff. The natural curves of the back may be exaggerated and there may be an abnormal curvature of the spine or a bony protrusion in the midline of the back. There may be a bony peg at one level of the spinal canal, or a fibrous band running across it and dividing it into two. The spinal cord may become excessively wide because of abnormal fat or fibrous tissue lying inside the spinal canal. There may also be leg, bladder, or bowel problems.

## Possible Effects

- incontinence
- foot deformities
- weakness of the lower limbs
- loss of reflexes
- numbness of the legs

## Symptoms

- back stiffness and pain

Although there are generally no particular symptoms to spina bifida occulta, there are a few characteristics that are common to the condition:

- A small dimple in the skin along the spine - these are

usually (but not necessarily) found in the lumbar/sacral region of the spine

- A small dimple with numerous long thick hairs growing out of it
- fat pat over the occulta or at the base of the spine

## Prevalence

- sensitivity to the region when pressure is applied
- unfelt voiding or bowel movement

Not all of these signs may be present at birth, but may develop later in life. This is because spina bifida is a dynamic condition and some areas of function will change with time.

In North America the incidence of spina bifida occulta is in excess of 25%. Many people will have the condition but not find out about it until they have a back X-ray for an unrelated problem. Although plain X-rays of the back will generally show the bony deformity, it is necessary to carry

## Treatment

out further investigation in order to see the abnormalities lying within the spinal canal. Magnetic Resonance Imaging (MRI) is the most helpful, and can be used to measure the whole length of the spinal cord. MRI also measures the nerve roots and any soft tissue swelling that lies within the spinal canal at the level of the bony abnormality.

Spina bifida occulta and its related spinal cord and nerve root abnormalities occur early in the pregnancy. They cannot be corrected by an operation and can lead to permanent disabilities requiring long-term management. However, it is important for people, especially children, affected with the condition to be examined regularly. A clinic should look for signs of deterioration in the power and feeling in the legs and in bladder and bowel function. If problems are detected, surgery may be necessary to free the

## Prevention

spinal cord and nerve roots from whatever is tethering them or causing compression. More specifically, a fat and fibrous tissue may have to be removed, a peg or fibrous band running through the spinal cord may have to be taken away, or a dermoid (underneath the skin) cyst cut out.

As this condition is acquired before birth, it is important for the mother to take appropriate doses of folic acid before and after becoming pregnant.

**For more information please contact:**

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