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. There are varying degrees of severity of spina bifida occulta:

- Mildest forms present as the plates of bone that form the spinal arch fail to fuse completely. This generally only affects a single vertebra, particularly the vertebrae 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.
- The most severe of cases presents in the form of several fused vertebrae. This may cause a shortened and often stiff back in an individual. The natural curves of the spine may be exaggerated and there may be abnormal curvature 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 in two. The spinal cord may become excessively wide as a result of abnormal fat or fibrous tissue inside the spinal canal. There are often leg, bladder and bowel problems.

Possible Effects

- Incontinence
- Foot deformities
- Lower limb weakness
- Loss of reflexes
- Leg numbness

Symptoms

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

- Back stiffness and pain
- Small dimple usually in the lumbar/sacral region often with long hairs growing out of it
- Fatty pad over the occulta (base of the spine)
- Sensitivity to region when pressure applied
- No voiding or bowel sensation

*Due to the dynamic nature of the condition characteristics may change over time.*

Prevalence

In North America the prevalence is believed to be as much as 25% of the population. Many people do not know they have the condition until an x-ray for unrelated issues is ordered. It is then necessary to investigate further using MRI (magnetic resonance imaging) as it measures the length of the spine as well as never roots and any tissue swelling within the spinal canal and bony abnormalities. These abnormalities occur early in fetal development and cannot be corrected by surgery, and can lead to permanent disability requiring long-term management. It is important to maintain regular medical care and follow-up especially for children.

Prevention

As this condition is acquired in early stage fetal development it is important for all women of child bearing age to take appropriate doses of **Folic Acid** prior to and during pregnancy.