

### **HERNIATED DISC**

A herniated disc, also known as a slipped disc, occurs when a degenerate intervertebral disc leads to the disc nucleus pushing into the annulus, and sometimes out of it, through a tear or rupture, resulting in pain.

#### What are Intervertebral Discs?

Bones of the spine providing support and protection to the spinal cord. The discs function as shock absorbers and allow for the spinal segments to move. They are small, oval spongy structures, with a tough outer layer (annulus) surrounding a soft, gelatinous inner portion (nucleus pulposus).



# Different Stages of Deterioration of Intervertebral Discs

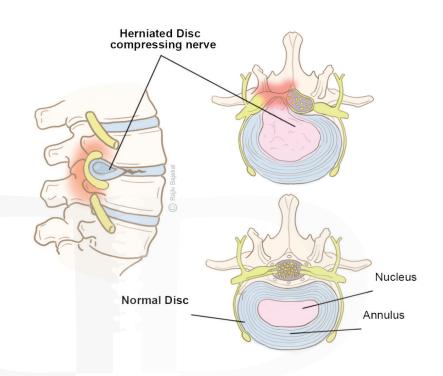
Note the normal disc and how the discs slowly degenerate, causing many different painful spinal conditions, when we neglect our spinal health

### Why does disc herniatation occur?

The spinal discs of children and young adults have high water content. With ageing, there is a decrease in the disc water content, causing them to shrink, become less flexible and reduce the distance between vertebrae. As the intervertebral spaces reduce, it results in more pressure on the exiting spinal nerves, which is more pronounced in the lower spine.

## Herniation of Intervertebral Discs

When the intervertebral disc is compressed, it will initially cause annular tears and ultimately the nucleus may prolapse, causing a lot of discomfort by exerting pressure on the spinal nerve. This condition is known as a herniated disc.



#### What are the risk factors that contribute to having a slipped disc?

Conditions that can weaken and degenerate the spinal disc include:

- Genetic factors
- A diet rich in processed food and fatty foods that contributes to atherosclerosis of the blood vessels to the vertebrae
- Improper lifting
- Smoking
- Obesity -that places added stress on the discs (in the lower back)
- Sudden pressure (which may be slight)
- Repetitive strenuous activities.

A sedentary lifestyle and weak core muscles are often blamed for a slipped disc. Overweight people and older people are at increased risk for a slipped disc as their spinal discs must support their higher weight. Herniated discs occur more commonly in men than women.



## Disc Herniation seen on a MRI

The intervertebral discs seem to have ruptured, indicating disc herniation. The discs in the upper spine are healthy.

#### What are the ways to manage a slipped disc?

- (i) Physiotherapy and adopting an exercise program to develop a healthy set of core muscles is an excellent option while reducing pain. Pain killers and taking a break from heavy lifting and painful positions are also beneficial.
- (ii) Remain Active It is tempting to rest and stop all physical activity due to severe pain from a disc herniation because of fear that the pain causes. However, this can lead to joint stiffness and weakness of the muscles. Remaining active by walking and stretching would provide much more relief.
- (iii) Injections: Transforaminal epidural injections (hyperlink) and caudal epidural injections (hyperlink) are exceptionally good pain-relieving methods which allow natural healing of the disc in a relatively painless setting.

**(iv)Surgery** I may recommend surgery if the symptoms last longer than six weeks and the pain is uncontrolled by non-surgical methods or if the condition is affecting muscle function. At surgery, we remove the protruding part of the disc without removing the entire disc



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