

Oh my aching Back!

Janet is a 43 year old full time office worker who had been suffering from low back pain for several days. Her routine had been to exercise three days a week at the gym and care for her husband and three children. Her family physician diagnosed her as having a bulging disc in her low back. As a part of a comprehensive treatment, her physician referred her to physical therapy. The first day of physical therapy, a history was taken of her present injury followed by a physical examination. This included a pain assessment, tests for movement loss and other tests to assess her ability to move. A treatment plan was then established. Janet's concern was whether her back pain would get worse, would physical therapy help or would she need surgery. This was the most severe back pain that she had experienced and it greatly altered her ability to work and to care for her family.

Back pain affects an estimated 80% of the population. It's second only to the common cold for loss time at work. An intervertebral disc rupture (bulging disc) is only one cause for severe back pain. This disorder can produce gradual or a sudden onset of back pain. The pain can also radiate either into the arms or legs depending on the disc level on the spine. It can also be accompanied with numbness, tingling and muscle spasms. Needless to say, this can make it very difficult to perform every day functional activities such as dressing and walking.

Let's take a look at the spine.

The spine is composed of 24 separate bones – 7 cervical (neck), 12 thoracic (chest), and 5 lumbar (low back) – called vertebral bodies, and two fused bones at the base of the spine called the sacrum and the coccyx. Between each of these vertebral bones is an intervertebral disc, which is a gelatin-filled structure that separates and provides shock absorption for the vertebral bones. The spinal cord, which controls movement and sensation of the arms and legs, travels through a canal within the vertebral column (spine). The nerves exit from each level of the spine and travel into the arms and legs to provide motor (movement) and sensory function.

You may hear of disc injuries being referred to as a slipped disc, bulging disc, herniated disc, or disc protrusion. When a disc bulges, the gelatin-filled center pushes outward against the cord. This can cause pain, numbness, tingling, and weakness in the legs if a lumbar disc is involved and in the arms if a cervical disc is involved. There are varying stages of disc injury, ranging from a mild bulge to complete herniation of the disc contents. After a physician's evaluation and completion of the appropriate diagnostic studies, physical therapy can be very beneficial, particularly if the patient is treated during the early onset of symptoms. There are numerous occasions where physical therapy is successful in treating disc problems and preventing surgery as in Janet's case.