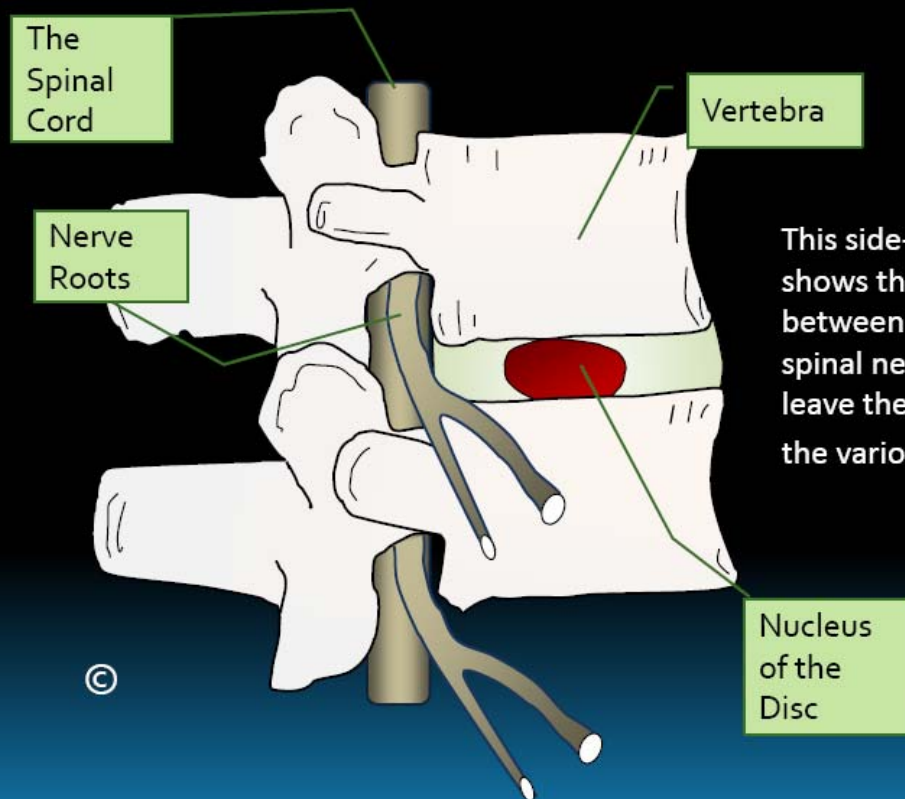
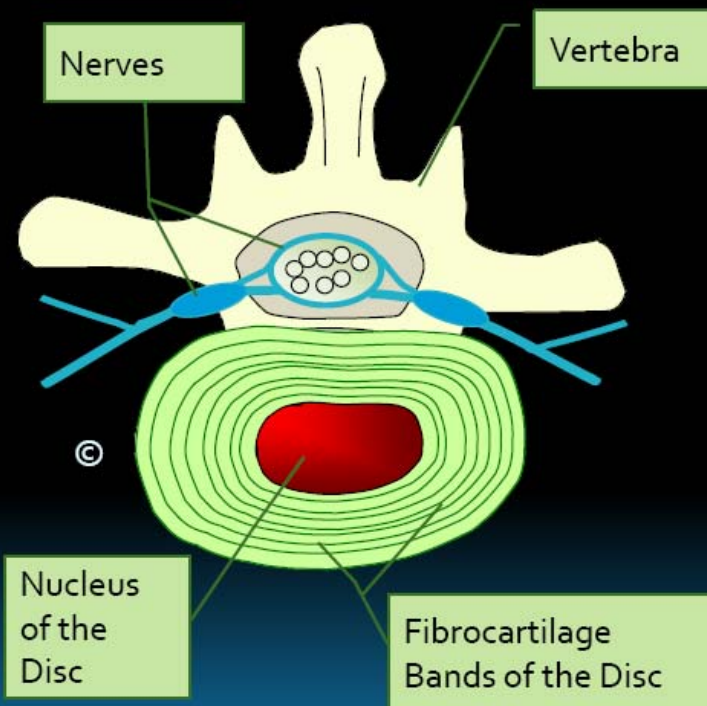


# Intervertebral Disc Injuries

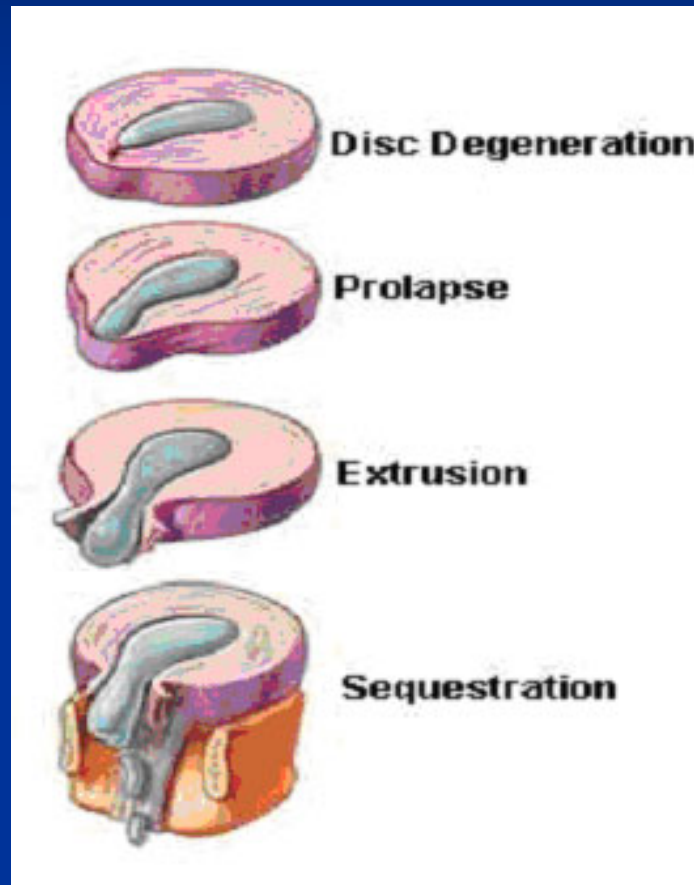


This side-view schematic shows the relationship between the disc and the spinal nerves. The nerves leave the spine and travel to the various parts of the body.

# ANATOMY: THE DISC



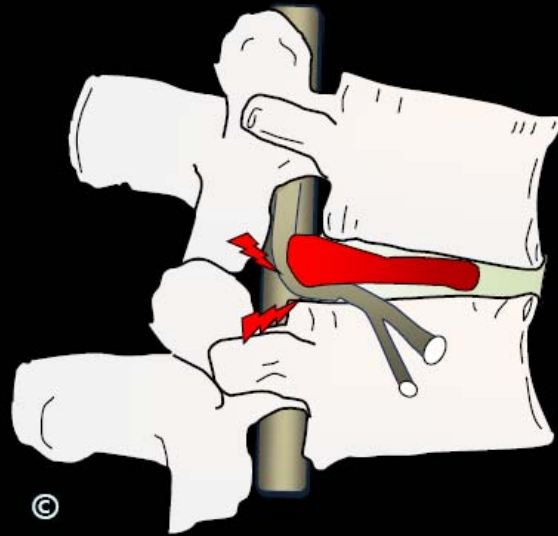
*This cross-sectional schematic shows the relationship between the lumbar disc and the spinal nerves.*



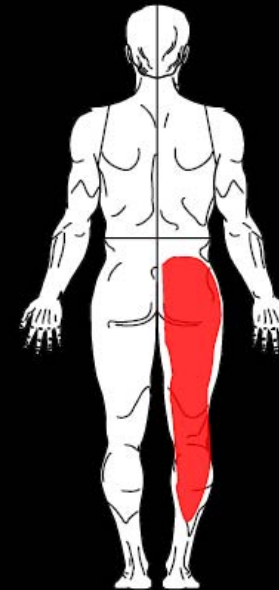
■ There are many degrees of disc herniation:

- Bulge
- Protrusion
- Extrusion
- Sequestration

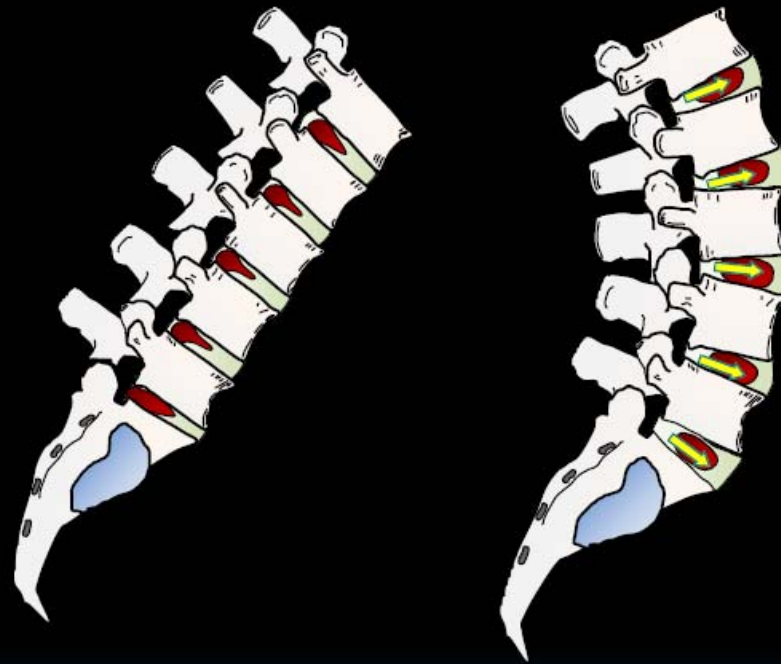
\* The disc can cause pain without compressing a nerve root (ie. Sciatica)



When the lumbar disc is disrupted it can interfere with the spinal nerves. This can result in sciatica, muscle weakness, and other neurological symptoms.

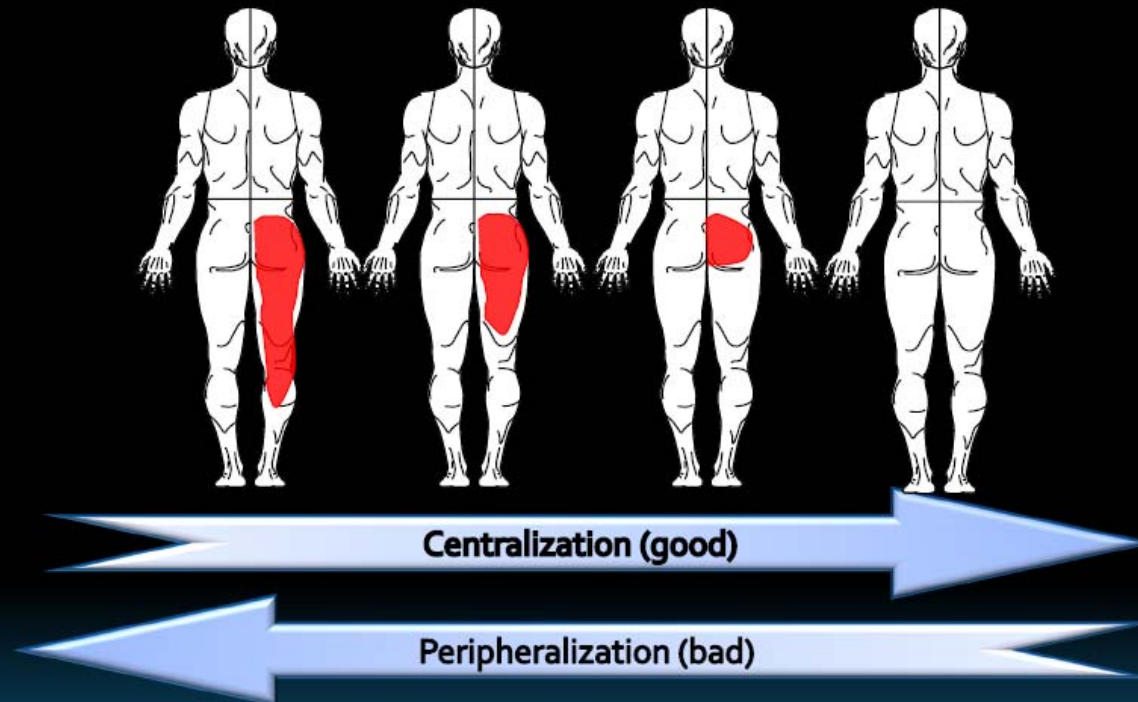


Leg pain caused by irritation of spinal nerves is called sciatica.



The premise of the extension exercises is based on the expectation that lower back extension manipulates the gel-filled nucleus away from nerves. We know that in healthy discs bending forward (flexion) causes a distortion backward toward the spinal nerves. Extension helps to manipulate, at least in healthy discs, the gel away from the spinal nerves.

## Measuring Response to Treatment



This schematic shows various distributions of leg pain in sciatica. Treatment that results in centralization (symptoms regressing to a more central location) is considered to be successful, while treatment that results in peripheralization (symptoms extending further down the leg) is not successful. If extension exercises cause peripheralization, discontinue them immediately.