

AXIS



SPINE

CENTER



AXIS SPINE NEWSLETTER

Disc Replacements by **ROLAND KENT, MD**

WHAT IS AN ARTIFICIAL CERVICAL DISC REPLACEMENT?

An artificial cervical disc replacement is a type of spine surgery in which a spine surgeon removes the damaged disc and replaces it with an artificial disc. The artificial disc is made of a polycarbonate urethane middle surrounded by cobalt chrome.

Typically, discs serve as a shock absorber between the vertebrae (bones) in the neck and help to facilitate normal neck range of motion with help of the facets (the joints in the back of the neck). The artificial disc mimics the motion of a natural human disc. There are several different disc replacement devices on the market and one is even FDA approved to be used at two levels of the cervical spine.



ROLAND KENT, MD

Dr. Roland S. Kent is a fellowship trained Spine Surgeon and the co-founder of Axis Spine Center. He specializes in minimally invasive spine surgery, robotic-assisted spine surgery, revision spine surgical care, complex spinal disorders, alternatives to bony fusion including disc replacement, fracture care, bone health, and sacroiliac (SI) joint disease. He has a wealth of experience and a passion for returning patients to function through the careful utilization of non-surgical spine treatment strategies combined with the appropriate, evidence-based application of surgical interventions.

WHEN WOULD YOU CONSIDER AN ARTIFICIAL DISC REPLACEMENT INSTEAD OF A SPINAL FUSION FOR A NECK CONDITION?

An Artificial Disc Replacement is typically an option for patients with mostly arm symptoms (radiating, burning, tingling and numbness) as opposed to isolated neck pain. The facet joints must be healthy for this procedure.

WHAT ARE THE ADVANTAGES OF ARTIFICIAL DISC REPLACEMENT VS SPINAL FUSION FOR NECK CONDITIONS?

- Preserves natural range of motion in the neck
- Decreases stress on adjacent levels above and below
- Quicker return to everyday life, activities, work, and sports/exercise

HOW MUCH MOTION IS LOST WITH A SPINAL FUSION VS ARTIFICIAL DISC REPLACEMENT?

Approximately 10 degrees of motion (7% of the total range of motion in the neck) is lost in the neck, per level fused.

WHAT TYPE OF SURGEONS OFFER DISC REPLACEMENT?

Disc replacement is typically offered by a fellowship trained spine surgeons who understand the normal motion of the neck. This is another reason that the training of the individual performing your surgery is extremely important.

