



Christiana Care conducts first prosthetic cervical disc trial

NEW DEVICE MAY PROVIDE MORE EFFECTIVE TREATMENT OPTION



Christiana Care's Department of Surgery Spine Section is in the early stages of a clinical trial designed to assess a new treatment option for patients suffering from painful degenerative disc disease (DDD).

The option involves surgical implantation of a new titanium-alloy prosthetic disc. According to Christiana Care Neurosurgeon Yakov U. Koyfman, M.D., the trial's principal investigator, all members of the Spine Section are involved in the trial.

Currently, according to standards, surgeons use cervical fusion to treat DDD, which is a condition resulting from the natural aging process. As people grow older, their intervertebral discs lose flexibility, elasticity and shock-absorbing characteristics. This leads to chronic pain, nerve root pathology and spinal cord compression.

During a fusion procedure, surgeons remove a degenerated disc and replace it with a bone graft inserted between the two vertebrae located above and below the intervention area. Often, metal implants are then attached to the two vertebrae to stabilize the area until the graft fuses to the vertebrae, creating one solid piece of bone.

Problem with fusion

A problem with fusion is that it can propagate the degenerative process in the spine level above and below the surgical intervention, according to Dr. Koyfman. "Within the next few years, people return with the same clinical problems they had before, sometimes even worse," he says. "So, we have to continue the same kind of fusion. But it's like



From left, Critical Care Research Manager Christine Babenko, RN, Yakov Koyfman, M.D., neurosurgeon, Dana Moses, PA, and patient Aaron W. Silverman, who received the new prosthetic cervical disc implant.

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*Prosthetic cervical disc trial,
continued*

a domino effect, and the patient ends up with a completely fused segment.”

First multi-level trial

Christiana Care surgeons are investigating whether they can prevent that kind of progression by replacing the removed disc with the new Prestige LP Cervical Disc prosthetic. Additional benefits include pain relief, preservation of motion in the cervical spine and increased functional capacity. During this first multi-level artificial disc clinical trial, investigators are assessing outcomes to determine if results will support a U.S. Food and Drug Administration application that could allow the approved future use.

Investigators are enrolling patients for the randomized trial. Half will undergo conventional surgical intervention and half will undergo prosthesis implantation, followed by evaluation at regular intervals for a minimum of two years following the surgery.

“The rewards of using the Prestige prosthetic are substantial. It’s the best such device now available,” says Dr. Koyfman. ●

New decision making model empowers bedside nurses

The Department of Nursing has redesigned its decision-making model to allow bedside nurses a larger role in shaping the future of nursing practice at Christiana Care.

Called Shared Decision Making (SDM), the new model uses smaller councils and an open comment forum to allow nurses to voice their opinions about proposed changes to nursing practice. “Our goal is to improve on our previous model by addressing issues that hinder its effectiveness,” explains Diane Talarek, RN, senior vice president, Patient Care Services and Chief Nursing Officer. “When developing the new decision making model, we considered it an opportunity to enhance communication, the number of councils and members, accountability, decision making and staff nurse representation.”

Four councils

Today there are four nursing councils: Quality and Safety, Professional Nurse, Education and Evidence-Based Practice. Each council comprises approximately 10 members from a variety of nursing roles, including nurse managers, patient care coordinators, advanced practice nurses, staff development specialists, RN IIs and RNs. One to three advisors also sit on each council.