Study explores best ways to manage spinal surgery patients

Mar. 6, 2014, 10:16 AM

Kristin Archer, Ph.D., DPT, assistant professor of Orthopaedics and Physical Medicine and Rehabilitation at Vanderbilt University Medical Center, has received $1.7 million from the Patient-Centered Outcomes Research Institute (PCORI) to study postoperative management for degenerative spinal conditions.

After spinal surgery, many patients continue to have poorer health compared to the general population. Up to 40 percent report chronic pain and disability after surgery and approximately 20 percent undergo a reoperation.

“Physical therapy is usually offered to patients after spine surgery, but this treatment does not appear to be meaningfully better than advice to stay active,” Archer said. “Cognitive-behavioral therapy and self-management treatments show promise, but are unavailable or insufficiently adapted for postoperative care.”

Archer previously completed a small trial funded by the National Institute of Arthritis and Musculoskeletal Skin Diseases that demonstrated the benefits of cognitive-behavioral-based physical therapy (CBPT) in patients recovering from
spinal surgery. The CBPT treatment was developed in collaboration with physical therapists, spine surgeons, rehabilitation psychologists and patients at VUMC and Johns Hopkins Medicine.

CBPT is a patient-oriented, self-management treatment characterized by active participation and personal responsibility. The six-session program is delivered over the phone by a physical therapist and focuses on goal setting, graded activity, positive self-statements, relaxation techniques, relapse prevention and symptom management plans. CBPT targets fear of movement and decreased physical activity in order to improve long-term pain, disability and functional outcomes.

“The current study uses a larger and more diverse adult population to assess the CBPT treatment, with the goal of engaging patients in their own care, improving shared postoperative decision-making and maximizing gains in outcomes that are relevant and meaningful to patients,” Archer said.

The three-year PCORI study will evaluate which of two treatments provided via telephone — a CBPT program focusing on self-management or an education program about postoperative recovery — are more effective for improving patient-centered outcomes.

The randomized controlled clinical trial will enroll 260 patients who are having surgical treatment of a lumbar degenerative condition. They will have six weekly telephone sessions with a trained physical therapist and will be followed for 12 months after surgery to evaluate pain, disability, physical activity and general health.

In alignment with PCORI goals, this study involves patient and clinician stakeholders in all phases of research, from design and implementation to dissemination and sustainability.

“Results from this study will fill important knowledge gaps and generate critical information on a self-management approach to postoperative rehabilitation,” Archer said.

“There is an urgent need for adults recovering from spinal surgery to have readily accessible treatments that allow them to take an active role in their care. The long-term goal of this research is to provide low-cost, evidence-based programs that can be used across a variety of painful conditions faced by the older adult.”

PCORI is an independent, non-profit organization authorized by Congress in 2010. Its mission is to fund research that will provide patients, their caregivers and clinicians with the evidence-based information needed to make better-informed health care decisions. PCORI is committed to continuously seeking input from a broad range of stakeholders to guide its work. More information is available at www.pcori.org.

Related Posts:
Recent Stories from VUMC News and Communications Publications

1. **Study seeks to reduce opioid use for chronic pain**
   (http://news.vumc.org/2017/11/30/study-seeks-to-reduce-opioid-use-for-chronic-pain/)
2. **Clinical trial to assess shoulder pain treatments**
   (http://news.vumc.org/2017/03/30/clinical-trial-to-assess-shoulder-pain-treatments/)
3. **Study seeks to streamline validation of EHR data**
   (http://news.vumc.org/2017/08/31/study-seeks-to-streamline-validation-of-ehr-data/)
4. **First class of PM&R residents sets bar high for new program**
   (http://news.vumc.org/2017/02/23/first-class-of-pmr-residents-sets-bar-high-for-new-program/)

---

**Share This Story**

**Media Inquiries**

Leslie Hill (http://news.vumc.org/author/leslie-hill/) · (615) 322-4747 · ✉️
(mailto:leslie.hill@vanderbilt.edu?subject=Question about news story (Study explores best ways to manage spinal surgery patients)).

**Explore Story Topics**

Reporter (http://news.vumc.org/section/reporter/)
Department of Physical Medicine and Rehabilitation (http://news.vumc.org/tag/department-of-physical-medicine-and)
Kristin Archer (http://news.vumc.org/tag/kristin-archer/)
orthopaedics (http://news.vumc.org/tag/orthopaedics/) PCORI (http://news.vumc.org/tag/pcori/)
Reporter March 7 2014 (http://news.vumc.org/tag/reporter-march-7-2014/)
spine surgery (http://news.vumc.org/tag/spine-surgery/)
Hope

The first few minutes of Charlie's life were a blur, as a team of doctors and nurses at VUMC worked to resuscitate him and stabilize his heart rate. He was then transferred to the Neonatal Intensive Care Unit at Monroe Carell Jr. Children's Hospital at Vanderbilt.
Vanderbilt Nurse

Tucked away in a Vanderbilt conference room, 36 adults huddle over Lego pieces. Eleven teams have been assigned to assemble multicolored Legos using the written directions included in the packet. The result should be a Frankenstein figure.
Vanderbilt Medicine

Marissa Benchea has CF, and she is one of hundreds of thousands of adults not only surviving but thriving with a chronic childhood disease.
One hundred years ago, multiple "waves" of a deadly flu swept across the world.