In Spectrum of ACL Injury Treatment, New Study Reveals Cost Savings for Those Who Need Surgery

In late summer and early fall when youth and college sports begin, it's a similar refrain: a star on the varsity basketball team tore her anterior cruciate ligament (ACL) and is out for the season after surgery. A college football game stopped as a defensive safety hobbles off the field with an ACL injury. Annually in the U.S., more than 200,000 ACL injuries are reported, often by active young adult and adolescent athletes, though they can occur at any age. Depending on the severity of the injury, treatment may include rehabilitation or surgery and rehabilitation, and many patients and their families struggle with treatment decisions.

To aid in the decision making process, a study published today in the *Journal of Bone and Joint Surgery* [1] *(JBJS)* offers new information for those considering or needing ACL surgery. For the first time, researchers assessed the economic and societal impact of surgery in relation to the cost of the procedure and confirmed a significant cost savings to society over time.

The study, "Societal and Economic Impact of Anterior Cruciate Ligament Tears [2]," found the average lifetime societal benefit of reconstruction surgery is $50,000 per patient, with the majority of the societal savings coming from the patient's ability to return to a more functional and pain-free lifestyle and by minimizing any further damage to the knee that can lead to the development knee osteoarthritis in the future. In fact, the authors estimate lifetime societal savings in the U.S. of about $10.1 billion for the ACL surgeries annually.

"We know ACL patients who need it benefit from surgery, but until now, the true value of ACL reconstruction surgery has been hard to quantify," said John R. Tongue, MD, American Academy of Orthopaedic Surgeons [3] (AAOS) past-president. "Considering many ACL patients are young and eager to get back to their active lives, this study provides a key perspective they can look to when evaluating surgery versus rehabilitation."

An ACL injury can severely limit a person's level of activity and result in long-term repercussions such as an increased risk of knee osteoarthritis, which can lead to debilitating pain and make walking and standing difficult.

Each ACL injury is different and can range from a stretched ligament to a partial tear to a complete rupture. Equally so, each type of treatment is different, from structured rehabilitation to surgical reconstruction followed by rehabilitation. Patients or their family members should have complete ample information about costs, potential limitations and benefits of each type of treatment before making their decision.

In situations where a patient is active, such as a high school or college athlete, and would like to return to that active lifestyle after treatment, surgery to repair a partial or complete tear is often the best option, with a long-term success rate of 82 to 95 percent.

Rehabilitation can also be successful for patients depending upon their activity level, age and the severity of their injury. Through this study, patients now have the opportunity to compare direct and indirect costs of surgical reconstruction or rehabilitation and better understand the overall benefits of each treatment relative to the societal and economic savings.

"In younger patients, surgery for an ACL tear is usually the best option for getting them back on their feet and reducing the likelihood of arthritis down the road," said Mininder S. Kocher, MD, study author. "Patients and their families are often worried about their ability to return to sports, their mobility in the future and the cost of the surgery. This study sheds light on all three of these important factors."

To conduct the study, researchers reviewed data from the randomized controlled trial known as the KANON study, and the Multicenter Orthopaedic Outcomes Network (MOON) ACL reconstruction prospective cohort as well as literature. The data were applied to a Markov decision model from which they estimated the total societal savings associated with ACL reconstruction surgery by comparing costs for direct medical care and indirect costs, including lost wages from work and disability payments for both surgical and non-surgical treatments.

"This is the first study to demonstrate the importance of a societal perspective when considering the costs and benefits of ACL repair and policies that will affect access to this procedure," said study author and health care economist Lane Koenig, Ph.D. "The benefit of ACL reconstruction has long been known by patients who have returned to their active lifestyle following the surgery. This study provides a foundation for assessing the societal benefits of procedures and health services that will add to the conversation people are having about improved, cost-conscious health care."

Source URL (retrieved on *11/30/2015 - 12:05pm*):
http://www.surgicalproductsmag.com/news/2013/10/spectrum-acl-injury-treatment-new-study-reveals-cost-savings-those-who-need-surgery

Links:
[1] http://www.jbjs.org/
[2] http://www.anationinmotion.org/value/acl
[3] http://www.aaos.org/