

<b>Title:</b>	<b>A randomized clinical trial comparing three methods for Anterior Cruciate Ligament reconstruction: Patellar tendon, quadruple semitendinosus/gracilis and double-bundle semitendinosus/gracilis grafts</b>
<b>Issue/Rationale:</b>	<p>ACL deficiency affects the active working population in many ways. After the initial injury, patients will experience immediate pain and swelling. Subsequently, the person will experience instability or “giving way” episodes, pain, swelling and a significant deterioration in their quality of life. At the present time, there is no consensus or good scientific evidence to determine what is the best surgical procedure. There are various options to restore the ACL; including using the patients won patellar or hamstring tendons to create a new ACL. A relatively newer technique using the patients’ own hamstring tendon is the so-called double-bundle reconstruction.</p> <p>What is the difference in disease-specific quality of life outcome at two years, in patients with anterior Cruciate ligament (ACL) deficiency of the knee, as measured by the ACL-QOL, undergoing an ACL reconstruction procedure comparing patellar tendon, quadruple semitendinosus/gracilis (hamstring tendon) and double-bundle semitendinosus/gracilis (hamstring tendon) autografts?</p>
<b>Objectives:</b>	To compare patellar tendon versus the quadruple hamstring and the double-bundle hamstring autografts used in an ACL reconstruction by measuring the disease-specific quality of life outcome in patients with ACL deficiency in the knee. The outcome will be determined by using a validated, reliable and responsive outcome assessment tool, the Anterior Cruciate Ligament Quality of Life (ACL-QOL) questionnaire, at short (3-5month, 1 and 2 years) and long-term intervals following surgical treatment.
<b>Anticipated Results/Impact:</b>	It is expected that the findings from this study will definitively address the controversies regarding what is the best way to surgically correct patients with ACL deficient knees. It will provide reliable, scientific information for patients and their employers, physicians and surgeons to achieve a stable knee and return to pre-injury work and activity, while maintaining function, safety and restoring quality of life.
<b>Keywords:</b>	Anterior Cruciate Ligament, Patellar tendon, quadruple semitendinosus/gracilis, double-bundle semitendinosus/gracilis grafts
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<b>Comments:</b>	This project has two phases.