Frequently Asked Questions

ACL Reconstruction Questions

Q. Should the operation be done on an urgent or emergency basis?

A. No! It is critical to recover normal or nearly normal motion before surgery. This will reduce the likelihood of excess scar tissue developing after your surgery. Following an acute injury it may take 3-4 weeks before your knee is "ready" for surgery.

Dr. Bach checks the range of motion on one of his patients

Q. Do you have information on the surgery you are planning on performing?

A. Yes! In the office you will be provided with an ACL information packet. This has our "general information" ACL guide, a prescription for durable medical equipment (crutches, brace, custom postop functional brace, ice machine), technique paper, a manuscript on allografts, a brochure from Allosource on allografts, and a listing of pertinent manuscripts that we have published.

Q. Is the surgery performed arthroscopically? Is this "minimally invasive surgery"?

A. Yes! The procedure is performed arthroscopically. If you use your own tissue a 3 inch incision is made over the front of the knee to borrow the tissue used to reconstruct your ACL. The remainder of the procedure is performed entirely arthroscopically through small ¼ inch incisions.

Q. What graft do you use to fix my ACL?

A. Your torn ACL is replaced with one of several grafts. In general the majority of patients are reconstructed using their own middle one third of the patellar tendon. This has been the "workhorse" in my practice since 1986. Another commonly used graft is an allograft ("cadaver graft"). Since 2000 approximately 40% of the ligament reconstructions performed by Dr. Bach are performed with an allograft. Candidates for allografts are patients over 40 years of age, petite females whose own tissue may be insufficient, patients who may have some early 'wear" or arthritis, patients who have kneecap symptoms ("patellar pain"), patients who desire to have left and right ACL deficient knees reconstructed concurrently, patients who have had a previous ACL which has return or stretched out, and patients who have sustained a multiple ligament injured knee (eg. knee dislocation). In selected situations we will use the hamstring tendons for ACL reconstruction. Some surgeons use quadriceps tendon an Achilles tendon

allograft. The most important thing for patients to know is that they should rely on the recommendations of an experienced knee surgeon that they trust. There are several ways to reconstruct the ACL and each tissue/technique has its advantages and disadvantages.

Q. What if I am skeletally immature?

A. The decision to perform or delay ACL reconstruction can be a difficult decision in the active adolescent who has significant growth remaining. Many surgeons will recommend activity modification and use of an ACL brace until the child has approached skeletal maturity and then recommend a standard ACL reconstruction. The literature documents that the ACL deficient knee in the child/adolescent behaves similarly to an adult in that the patient is at high risk for reinjury with resultant injury to the joint ("articular") surfaces or menisci ("cartilage"). We also find that most kids will be non- compliant with activity modification or brace usage. When we see kids in the office who have growth remaining we will obtain an xray of the hand to determine the "skeletal" age which may vary with the patient's chronologic age. As a rule girls will grow to a skeletal age of 14, boys to 15.5. Girls generally mature earlier than boys and usually will grow for two years beyond the onset of their menses. In these patients we may recommend a different graft source with a modified technique (eg. Hamstring tendons) to reconstruct the ACL. The major concern that surgeons have with ACL reconstruction in the skeletally immature patient is the possibility of a growth arrest or angular deformity if a bone tendon bone patellar tendon graft is used to reconstruct the ACL.

Q. What is an Allograft?

A. An Allograft (allo=other) is a term for a "cadaver' graft. People can donate hearts lungs and livers when they die. Similarly bones, joints and tendons can be donated. Nearly 500,000 allografts are used nationally on an annual basis. There are very strict eligibility criteria for tissue donation. These tissues are tested for HIV, hepatitis, and bacterial infections. Nevertheless, there is still a possibility of "disease" transmission which has been previously estimated at 1/1.8 million. We use one tissue bank, Allosource, a non profit tissue bank. We do not use "for profit" tissue banks, nor do we use multiple banks. Allosource has an excellent website which should be reviewed (**http://www.allosource.org**)

Q. What is an Autograft?

A. An autograft (auto=self) is tissue obtained from the patient to reconstruct the ACL. These tissues include the patellar tendon, hamstrings and quadriceps tendon.

Q. How do fix or secure the graft?

A. The grafts is secured with an interference screw that wedges the graft in its bone tunnel. We use a "metal" interference screw made of titanium. Some surgeons use "bioabsorbable" screws that are not detectable on standard xrays. There are a myriad of other fixation devices used by other surgeons.

Q. Do these screws have to be removed?

A. No. They remain in place and are biologically inert ("quiet")

Q. Where is the surgery performed?

A. We do almost all of our outpatient ACL surgeries in the RUSH Surgicenter (**http://www.rushsurgicenter.org/**) If you visit this website you will find directions to the Surgicenter and other valuable information.

Q. Will my surgery require a hospitalization?

A. No. ACL reconstructive surgery has been routinely performed on an outpatient basis since 1993. Dr. Bach has performed over 1200 consecutive outpatient ACL surgeries.

Q. What kind of anesthesia is used for the operation?

A. Almost everyone undergoes a "general anesthesia" which means that the anesthesiologist puts you to sleep. Some surgeons prefer to do the surgery using a regional ("spinal/epidural") anesthesia. Some surgeons incorporate a "femoral nerve block" for postoperative discomfort. The incidence of postoperative nausea and vomiting is extremely low.

Q. Will I need to have some preoperative lab work?

A. Yes. You will need some basic bloodwork performed before surgery. Unless you are over 50 or have a heart murmur you will not need an EKG. If you are a smoker we may order a chest xray. If you are a woman in your reproductive years it is required by state law to obtain a pregnancy test.

Q. How will I know when my surgery is scheduled?

A. Patients frequently schedule surgery when they see us in the office. Some patients may desire a second opinion or may go home and then call back to our secretary to schedule their surgery. Surgery is scheduled through our secretary (312-432-2353). As noted you will need to have preoperative lab work performed. You will be called by the Rush Surgicenter the day prior to your surgery. You will be asked general health questions by the anesthesia/nursing team. You will be informed **WHAT TIME** your surgery is scheduled for, and you will be asked to arrive at the surgery center approximately 1-1.5 hrs prior to your surgery. You will also be reminded **NOT** to eat or drink anything after midnight the evening prior to surgery. **IF** you eat breakfast or drink juice or coffee your surgery will be postponed.

Q. What clothing should I wear to the Surgicenter?

A. You should wear loose fitting pants or shorts as you will have a long leg brace on your knee.

Q. How long does the operation take to perform?

A. Usually the surgery takes 1.5 to 2 hrs to perform dependent upon whether any additional "work" is required. A meniscal (cartilage) repair may add 30 to 45 minutes to the procedure.

Q. How much pain will I have after surgery?

A. At the conclusion off the surgery we inject some pain medication into the knee joint and skin incisions. You will probably require some [pain medication in the recovery room. You will be given a prescription for some postoperative pain medication (Vicodin or Darvocet). The average patient will take some pain medications for 5-7 days postoperatively. The average patient takes a total of 12 vicodin tablets. Patients can take an anti-inflammatory medication (Advil or Aleve) which also can help reduce discomfort. We will also place motorized cooling pad or ice pad on your knee which helps reduce discomfort and swelling.

Q. Will I have a brace on my knee and if so for how long?

A. If your own patellar tendon tissue (autograft) is used to reconstruct your ACL you will have a long leg brace on your knee for 6 weeks. It will be worn while you are walking to protect your donor site should you slip or fall. Additionally the brace is worn while you sleep until you have regained complete extension (straightening) of your knee.

Q. Will I need to use a motion machine after surgery?

A. We stopped using a CPM (Continuous passive motion) machine in 1991. Although some surgeons still use the machine we noted a reduction in reoperations related to knee stiffness issues. The CPM machine does not provide extension (straightening) which is the most common reason why a patient might require an additional surgery to "clean out" scar tissue.

Q. How often will I need to be seen after surgery?

A. You will be seen the day after surgery for a dressing change, to assess your motion and make certain that your knee is not too swollen. Sutures are removed between 8 and 12 days postoperatively. If you have met your motion goals at that time you will next be seen at 6 weeks postoperatively. You will be seen at 3, 4.5, and 6 months postoperatively. We then will see you at 9 and 12 months postoperatively. At one year postop you are discharged to be seen on an "as needed basis". We are often conducting ACL followup studies and you may be contacted several years postoperatively to participate in a free followup study of your result.

Q. Will I need physical therapy before or after surgery?

A. If you have sustained an acute knee injury and your motion is not normal you will likely be referred to physical therapy to regain your motion "prehab". Following surgery you can expect to be in supervised physical therapy for 4 months. You will attend therapy 3 times weekly providing your insurance covers these visits. You will also be provided with a home exercise program.

Q. What are some general guidelines after physical therapy?

A. You will attend PT the day of surgery to review crutchwalking and some basic exercises that you will do at home until you begin supervised PT at one week postoperatively. You will be on crutches 5-7 days. You may start on a stationary bicycle by 10-14 days. You could progress to an elliptical, stairstepper, treadmill by 4-6 weeks. You could get cleared for "straight ahead" running by 8-10 weeks postoperatively. Return to sports guidelines are dependent upon several variables (motion, stability, strength recovery). Some athletes are cleared for return to sports at 4 months postoperatively. We recommend that you use a custom ACL functional brace for "hard cutting, pivoting" sports (basketball, football, soccer, skiing) until one year postoperatively.

Q. Will I need to take antibiotics?

A. You will be given one dose of an intravenous antibiotic shortly before your surgery. You will not be given antibiotics postoperatively.

Q. When can I drive?

A. If your right knee was operated on it is my opinion that you can not drive for 6 weeks. If you drive with your brace on and get in an accident you could be held liable. If your left leg was operated on you can drive as soon as you are off of pain medications and comfortable.

Q. When can I go back to work or school?

A. Return to work is dependent upon the type of work you perform. Most patients who work a sedentary type of job will take off a week of work. Students frequently will miss one week of school. Patients who are heavy laborers may not be able to return to work for 3-4 months depending on their work level. In these situations the employer may have modified job descriptions.

Q. When can I return to sport?

A. This is dependent upon motion, stability and strength. Usually this is between 4 and 6 months.

Q. What are some of the complications that could occur with ACL surgery?

A. The likelihood of developing an infection is less than 1%, as are the other major complications such as a blood clot in your leg ("deep vein thrombosis"), pulmonary embolus, patellar tendon rupture, patellar fracture. Our reoperation rate for motion problems postoperatively has been less than 1% since 1993, and overall less than 2% since 1986. Our stability success rate with primary ACL reconstructions has been

over 90% when we evaluate patients at a minimum of 2 years postoperatively. The most common reason we have had to reoperate on our ACL patients is for a retear of a meniscal repair. Ten to 15% of our meniscal repair patients will retear their meniscus at variable time periods postoperatively. In our studies about 12% of patients will continue to have some symptoms of discomfort or mild pain with stair climbing.

Q. How satisfied are our patients with their surgical result?

A. In our published studies 95% of our patients are "completely" or "mostly" satisfied with the surgical outcome. If the patients are asked if they would have their opposite knee "fixed" in a similar fashion if they tore their other ACL 95% reply "yes".

Q. How many ACL's have you "fixed"? How many do you reconstruct annually?

A. Currently I perform over 100 ACL's annually. As of January 2006 I have performed over 1600 knee ligament reconstructions since July 1986.

Q. What kind of expenses are associated with an ACL reconstruction?

A. You will have several charges which include 1) the surgeon's charge for performing the procedure, 2) a charge from the anesthesiologist for taking care of you during your surgery, 3) a charge from the Surgicenter for the use of the facility, recovery room, implants, instrumentation, arthroscopic equipment etc., 4) a charge for "durable medical equipment"-crutches, your immediate postoperative brace, your custom postoperative functional brace (DonJoy Defiance), and a motorized ice cooling unit (DonJoy Iceman). It is important for you to know what your insurance will and will not cover as well as knowing what your "co-payments" will be following your surgery.

DonJoy Defiance Brace

Q. What if I have additional questions after my visit, reading the information packet, visiting *kneeligamentdoc.com*, and reading "commonly asked questions"?

A. You can call our office and speak with John Bojchuk, MS, ATCL, our physician office assistant. John has worked with Midwest Orthopedics at RUSH and Dr. Bach in some capacity since 1987. His office phone number is **312-432-2359**. His email is **<john.bojchuk@rushortho.com>**

Q. Can I look at some diagrams of the ACL surgery?

A. Yes. Please check out my technique guide with diagrams and arthroscopic images. Click the following to watch Dr. Bach's ACL reconstruction video.