Anterolateral Ligament (ALL) Reconstructions

The anterolateral ligament has been identified as a capsular thickening that provides joint stability especially in patients who have torn their anterior cruciate ligament. Combined injuries to the anterior cruciate ligament and the anterolateral ligament increase the relative instability of the knee. X-rays can sometimes show an absolute injury to the anterolateral ligament or capsular attachment site via a small evulsion type fracture called a Segond fracture. Not infrequently patients will be seen by non orthopedic surgeons and have x-rays obtained and will be told they have a small fracture about the posterolateral aspect of their tibial plateau or proximal tibia which truly is a Segond fracture due to a ligamentous injury and pathognomonic for an anterior cruciate ligament tear. Therefore, it is important to identify these features on the x-ray and they represent probably a more significant ligamentous injury.

It has been recognized that this is an important stabilizer and in patients now who have torn their anterior cruciate ligament, it is plausible that they would benefit from a combined procedure of reconstructing their anterior cruciate ligament as well as reconstruction of their anterolateral ligament or capsular contiguation. Anatomic studies have demonstrated a true structure, but probably not absolutely a ligament as we would normally consider. Nonetheless, this structure provides significant stability and especially in patients who have significant increased joint laxity and are playing cutting and pivoting sports, may benefit from concomitant procedure of the anterior cruciate ligament and anterolateral ligament complex. This is especially seen in females who have significant genu recurvatum or hyperextension of their knee and combined with an anterior cruciate ligament injury and plan on returning to sports such as soccer where a great deal of stopping, cutting, and pivoting will take place. This may also, in some regard, serve as a protective stabilizer for the reconstructed ligament or graft.

Typically the reconstructive procedure is performed using a hamstring either autograft or allograft tissue. Frequently allograft will be selected as it is an extra articular structure that provides good joint stability without compromise of a patient’s hamstring. The post operative rehabilitation course after that combined procedure is similar and is typically carried out per the normal ACL protocol based on graft use and other associated procedures. Limited information with regard to outcomes with regard to those combined procedures are available at this point, but biomechanically this appears to provide relative benefit and is now being carried out on patients with issues as described above.