Introduction

Injuries of the posterolateral corner of the knee are infrequent but can cause severe disability due to both instability and articular cartilage degeneration ***(Wascher et al., 1993).***

These injuries do not usually occur in isolation but are often associated with injury of the anterior or posterior cruciate ligament ***(Kruk et al., 1998).***

The diagnosis of subtle lesions of the posterolateral corner can be elusive unless there is a high degree of clinical suspicion for possible injury of this region. The consequence of missing a posterolateral injury in the presence of a known tear of the anterior or posterior cruciate ligament can be cause of failure of the reconstructed cruciate ligament ***(Harner et al., 2000).***

Recent studies have been showed new light on the complex anatomy and functional mechanics of the posterolateral corner of the knee, and they provide a framework for improved diagnosis and treatment of these often disabling injuries ***(O'Brien et al., 1991).***

Proper diagnosis of injuries to the posterolateral structures with a clinical examination is still difficult. Posterolateral rotatory instability resulting from injury to the posterolateral structures may be unrecognized because of subtle findings that can be overlooked on a physical examination, because these injuries are relatively less common and, in some cases, because they are combined with other ligament injuries***(Noyes et al.,1996).***

The posterolateral drawer test, external rotation recurvatum test, adduction stress test at 30° of knee flexion, dial test at 30° and 90°, and reverse pivot shift tests are considered to be the most reliable tests for determining posterolateral injury***(LaPrade et al.,1997).***

Patients with isolated PCL tears frequently have few functional limitations ***(Keller et al., 1993).***

However, PCL tears combined with other ligament injuries of the knee cause more residual functional limitations ***(Noyes et al., 1996).***

Nonoperative treatment of grade-I or II injury of the posterolateral corner can have a good outcome ***(Kannus., 1989).***

Nonoperative treatment of complete tears involving the posterolateral corner of the knee has generally led to poor functional results ***(Kannus., 1989).***

A program consisting of gait-retraining and comprehensive muscle rehabilitation decreased pain and improved function in a small series of patients with combined posterolateral and cruciate ligament injuries, but reconstructive surgery is usually necessary in active patients ***(Noyes et al., 1996).***

Operative treatment of acute lesions of the posterolateral corner of the knee is generally more successful than is surgery for chronic posterolateral injury ***(Cooper et al., 1991).***

When grade-III injuries of the posterolateral corner are diagnosed acutely, direct anatomic repair of all injured structures within three weeks has the highest likelihood of giving the patient an optimal result ***(Jacobson., 1999).***

Arthroscopy performed before open repair facilitates the diagnosis of lateral compartment injury and allows treatment of any associated meniscal or cruciate ligament pathology ***(LaPrade., 1997).***

An operative approach through the injured structures has been recommended, but this requires a thorough understanding of the anatomic relationships to be accomplished safely ***(Terry et al.,1996).***

Treatment of posterolateral injuries should proceed from deep to superficial, with repair of structures by direct suture, sutures via drill holes through bone, or suture anchors as appropriate ***(Westrich et al.,1995)***.

In the acute situation where the severity of injury precludes direct repair, involved structures can be augmented with hamstring tendon, biceps femoris tendon, iliotibial band, or allograft ***(Veltri et al.,1994).***

The treatment of chronic PLC injuries differs from that of acute disruptions. Beyond 4 to 6 weeks from injury, significant pericapsular scarring makes it difficult to localize and repair discrete structures; thus, reconstruction is favored.

In addition, chronic injuries may become associated with significant capsular stretching, leading to a more extensive rotational instability pattern, persistent subluxation, and the development of arthrosis ***(Hughston& Jacobson , 1985).***

Reconstruction by:

Proximal Tibial Osteotomy, Split biceps Femoris Tendon Transfer Surgical Technique, Fibular-Based Technique, Allograft Options In Posterolateral Corner Reconstructions ***(Westrich et al.,1995)***.