

INTRODUCTION

The anterior cruciate ligament is not an engima. It is simply a major joint stabilizing ligament. It is a highly vulnerable ligament in active sporting world.

The patients of chronic anterior cruciate ligament instability almost invariably disclose the same history: a significant twisting injury of the knee, most probably sport injury, football in the majority of them, followed almost immediately by pain and haemoarthrosis. Early medical examination of those patients result in reassurance that the injury is not severe and that full recovery without specific treatment could be expected. The patients do seem to improve for a time but then, at varying frequencies, they begin to sustain reinjury, resulting in significant disability. This often leads to surgical intervention for meniscectomy, with little, no improvement or even worse function. Sternous athletic endeavors and work activities have been modified or avoided. Although muscle rehabilitation satisfy a portion of these patients. A significant number still require further assistance. Reconstruction of the ACL then becomes a valid option.

The surgical treatment of chronic anterior cruciate deficient knee is a frustrating problem for orthopaedic surgeon. In search for a reliable technique almost every expandable structure around the knee has been used to replace the ligament, but with results so variable that many authors recommended surgical management only when symptoms of the ACL deficiency were severe enough to interfere with patient's activity in spite of a reasonable period of muscle rehabilitation.

Moreover the choice of surgery largely depends on the level of expected patient's level of activity. Extra-articular lateral substitution reconstruction using the iliotibial band, to resemble a lateral extra-articular ACL, has the advantage of being relatively easy surgery, needing only limited exposure and does not require a long period of rehabilitation, but could not achieve complete static stability of the knee. It was indicated for relatively inactive patients with mild antero-lateral instability with no high performance demands.

For physically active individuals with functional instability and an unwillingness to alter their life style a stronger reconstruction is required. By far autogenous patellar tendon graft was the most commonly used intra-articular substitute. This biological graft has well documented incorporation and revascularization after implantation. But this procedure carries the disadvantages of being a lengthy operation, with technical difficulties, long period of rehabilitation and has high possibilities of post operative complications.

The state of the art in treating injuries of the ACL has come long way in the past decade, and the future appears even more promising. We have acquired more knowledge and accuracy in isometric reconstruction of origin and insertion which is essential concept.