Unstable Knee??? The Posterior Cruciate Ligament (PCL) Reconstruction Seremban Experience. A Case Series.

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INTRODUCTION:

This is a study done to evaluate the functional outcome post posterior cruciate ligament (PCL) reconstruction at HTJS. The knee joint is a complex structure. It is made up by bones, ligaments and tendons. There are four ligaments that present in the knee joint name anterior cruciate ligaments (ACL), posterior cruciate ligaments (PCL) lateral and medial collateral ligaments. The PCL is the strongest and largest intraarticular of the knee joint, mainly the anterolateral bundle (ALB) and the posteromedial bundle (PMB). The PCL is the main posterior stabilizer of the knee. These PCL injuries normally doesn't occur in isolation, 95 % of it occur in combination with other ligament injury. This study is done to share the experience in treating PCL injuries in Seremban Hospital, Hospital Tuanku Jaafar (HTJS).

METHODS:

There were four patients who underwent arthroscopic PCL reconstruction since January 2018 till December 2018 (two females and two male). Three patients were secondary to motor-vehicle accidents and one from sports injury. All reconstructions were done using allograft (Tendo-achilles) with suspensory fixation on the femur and combined interference screw/staple on the tibia. All operations were performed by a single surgeon. The Tegner activity level scale were used to grade the work and sporting activities.

RESULT:

Mean time from injury to orthopedic review was 9 months (Range 4 to 24 months), Mean time from diagnosis to surgery was 5 months. (Range 3 to 8 months) the mean follow-up in our study was 3 month and were still been under our follow up. VAS score improved on average from 3 to 8 for all patients, and there were no post-operative complication reported in the series. In our series, the Tegner activity ratings improved from 55 to 95, 63 to 92, 32 to 65 and 52 to 96 for our patients respectively. The score for the third patient were far way lower than the first, second and fourth patient in view of patient suffered a traumatic brain injury with right sided hemiparesis post motor vehicle accident prior to the injury. The patient currently able to conduct her daily activity without pain and assistance, such as walking and housework.

DISCUSSION:

This study reported improvements overall in all our patient. We did note that patients on average patient had to wait more than a year before operations. This might be due to financial issue that need some approval form the other parties. One patient had suffered a traumatic brain injury with resulting long standing right sided hemiparesis preoperatively. This potential explains her rather low Tegner outcome scores however, the patient herself reports better subjective stability when mobilizing currently.

CONCLUSION:

In conclusion, the outcome for PCL reconstruction at HTJS are satisfactory based on our series. More number of patient and longer term follow-up in future would be beneficial.