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OUTCOME OF KNEE PRE-OPERATIVELY AND POST- OPERATIVELY USING (IKDC) SUBJECTIVE EVALUATION FORM

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Type of Publication: Observational Study

Conflicts of Interest: Nil

Abstract:

Background: The prospective study consists of 30 patients who had undergone Arthroscopic ACL reconstruction using ipsilateral hamstring autograft at the Department of Orthopedic with to study the Outcome of Knee pre-operatively and post- operatively using (IKDC) subjective evaluation form.

Result: There was no association of IKDC scoring at any time point in relation to side of ligament injury

Conclusion: ACL reconstruction shows fast and near complete recovery of patient in functional properties as revealed by our studies showing improvement in IKDC scoring over a period of 6 month.

Keywords: Knee pre-operatively, Post-operatively & IKDC.

Introduction

Patient-reported measures of knee function are important for the comprehensive assessment of rheumatology conditions in both clinical and research contexts. To merit inclusion in this review, measures of knee function were required to be patient reported and assess aspects considered important by adult patients with knee problems such as injury or osteoarthritis (OA). Therefore, measures used in rheumatology, orthopedics, and sports medicine were considered. Dimensions deemed to be important to patients included pain, function, quality of life, and activity level. To identify instruments fulfilling these criteria, we utilized published reviews of knee instruments (1), knee OA instruments, and measures for use in patellofemoral arthroplasty (2).

Material & Method

The prospective study consists of 30 patients who had undergone Arthroscopic ACL reconstruction using ipsilateral hamstring autograft at the Department of Orthopedic at Index Medical College Hospital & Research Centre, Indore for one year.

INCLUSION CRITERIA

- Willingness to participate and follow up
- No prior knee surgery
- Normal contralateral knee
- Clinical evaluation of instability by surgeon

EXCLUSION CRITERIA

- ACL injuries with associated intra articular fractures
- Osteoarthritic changes in X-ray

PRE–OPERATIVE EVALUATION

Clinical Evaluation

The clinical evaluation of a patient with suspected ACL injury starts with a good history of the mechanism of injury. A history of twisting injury to the knee i.e. internal rotation of femur on fixed tibia is the most common history.

The commonest symptom is giving way of knee which is an expression of the 'axial instability'.

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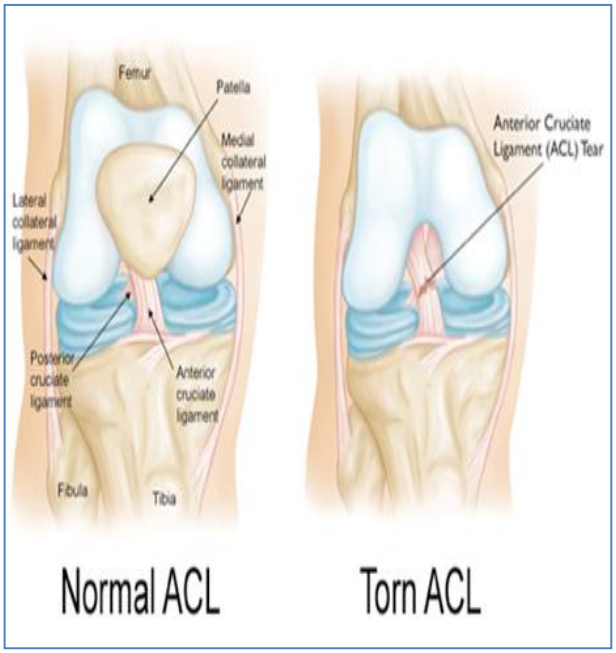

Figure 1: Normal ACL & Torn ACL

Table 1: Mean IKDC score at different time point

Time	IKDC Score
Pre–op	34.6
6 weeks	43.67
3 months	54.3
6 months	77.2
1 year	87.14

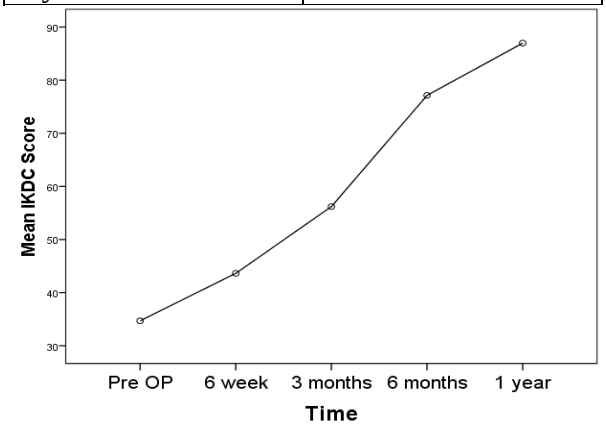

Figure 2: Mean IKDC score at different time point

Results

Table 2: IKDC score according to two different age groups

	<30 Year		≥ 30 year		P value
	Mean	Std. Deviation	Mean	Std. Deviation	
Per-op IKDC score	34.56	3.959	34.92	3.450	0.799
Post-op 6wk IKDC	43.50	3.330	43.83	2.855	0.779
Post-op 3 mth IKDC	56.44	6.167	55.83	7.530	0.809
Post-op 6 mth IKDC	77.56	1.977	76.50	4.189	0.360
Post-op 1 yr IKDC	87.78	2.734	85.75	5.379	0.183

Table 2 shows that there was no association of IKDC scoring at any time point in relation to side of ligament injury

Discussion

The rehabilitation following surgical reconstruction focuses on three main goals i.e. the restoration of ligament stability, restoration of muscular strength and the restoration and improvement of general state of fitness.[3]

IKDC scoring

In our study functional outcome was assessed by IKDC evaluation form at pre-operative phase and post operative phase at 6 wks, 3 months 6 months and 1 year. Rao et al post op evaluation done at 3 months, 6 months, 1 year, 18 months and 24 months.[4,5]

Study	Pre–op	6 wks	3 months	6 months	1 year
Rao et al[6]	48.8	48.6	85.8	89.8	92
In our study	34.6	43.67	54.3	77.2	87.14

In this study functional outcome was less as compare to study perform by Rao et al 2000 because max patient in our study are from remote area having poor knowledge of post op physiotherapy.[7]

Conclusion

ACL reconstruction shows fast and near complete recovery of patient in functional properties as revealed by our studies showing improvement in IKDC scoring over a period of 6 month.

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