To study the functional outcome of arthroscopic assisted anterior cruciate ligament using semitendinosis and gracilis graft

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Abstract:
Background:
Anterior cruciate ligament (ACL) injuries remain a common orthopaedic disease, particularly in young adults. The treatment of choice for ACL injuries is ACL reconstruction. The present study was conducted to observe and evaluate the functional outcome results of arthroscopic ACL reconstruction by hamstring grafts using Lysholm knee scoring system.

Materials and Methods:
A total of 30 patients underwent arthroscopic anterior cruciate ligament reconstruction with hamstring tendons using interference screw tibial and femoral fixation. This observational study related data were captured between February 2019 to December 2019 in a tertiary care teaching hospital, Mumbai. About 30 patients with arthroscopic anatomic ACL reconstruction using hamstring tendon graft were evaluated and followed up for functional outcome. Patients were evaluated for pain, functioning and stability of knee using validated Lysholm knee scoring systems.

Results:
The incidence of ACL tear is more in male patients in present study 77% of patients consists of male

In present study majority of patients had injury to right knee 63.33%. 10 (33.33%) patients sustained ACL tear due to RTA, 8(26.66%) patients due to fall and 12(40%) patients due to sports injury. In present study around 33.33% of patients had associated injury, medial meniscus injury in around 50% of the patients, lateral meniscus in around 40% of the patients amongst the associated injury.

We evaluated the patient at 6 weeks, 3 months and 6 months using Lysholm knee scoring system as this is statistically proven as a better rating system and is widely used. By using paired-t-test. The mean Lysholm score pre-operative was 70.16 with 13.88 standard deviation in 30 patients in the study. The mean Lysholm score at 6 weeks postoperative is 78.86 with 6.81 standard deviation

CONCLUSION
Anterior cruciate ligament injuries are more common in younger physically active individuals.

Male population is more prone to have anterior cruciate ligament injuries.

There is increase in the incidence of anterior cruciate ligament tears due to increased RTA and increased involvement of people in recreational sports.

There is increase in associated meniscal and chondral lesions with increased duration of the injury.

Arthroscopic anterior cruciate ligament reconstruction with semitendinosus and gracilis autograft is a good treatment option for anterior cruciate ligament deficient knees in healthy active individuals. Hamstring tendon grafts are easy to harvest, cosmetically acceptable and have less donor site morbidity.

Biography
Dr Mustufa Poonawalla is an Orthopaedic surgeon by profession and works with one of the private hospitals in Mumbai. He holds a diploma in orthopaedic, dnb in orthopaedic, diploma is sports medicine. He has presented an abstract of the functional outcome which he studied on his patient after arthroscopic assisted acl reconstruction using hamstring grafts.