OUTCOMES AFTER REVISION ACL RECONSTRUCTION AND CONCURRENT ADDITIONAL SURGICAL PROCEDURES IN SPORTS PERSONS

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MANDATORY DISCLOSURES

I **DO NOT** have a financial interest or any other relationship with a commercial company or institution.

BACKGROUND

- Early failures of ACL reconstruction are often associated with:
  - Technical errors
  - Unrecognized associated ligamentous injuries (posterolateral corner, MCL)
  - Lower extremity malalignment
  - Biological failure of graft incorporation
  - Other causes include fixation failure leading to graft laxity and recurrent instability.

METHODS

A Retrospective analysis of revision ACL reconstructions over 5 years was done

- 32 patients assessed, 24 included (19 males, 5 females)
- Surgical techniques used:
  - Re-reaming of native tunnels (10 cases)
  - New tibial tunnel creation (8 cases)
  - Posterolateral reconstruction (4 cases)
  - Medial open wedge HTO (8 cases)
  - Anterolateral tenodesis (Modified LeMaire) (22 cases)

Graft choices:

- Quadriceps tendon (8 cases),
- Tripled Peroneus Longus tendon (16 cases)

Outcomes were assessed using ***Lysholm score, IKDC subjective score, Lachman test, Tegner Score, and Pivot Shift test.***

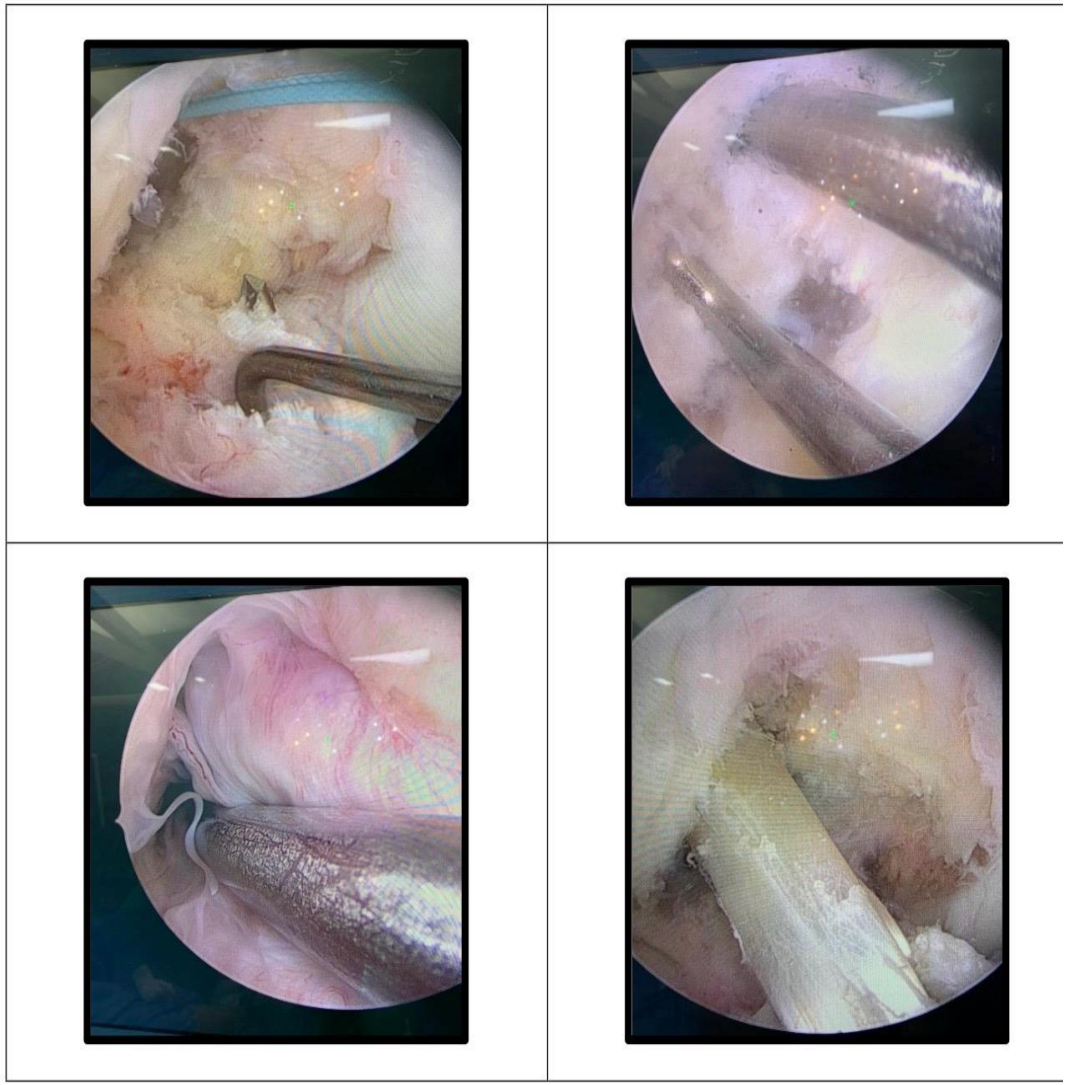


Figure :- Revision ACLR bypassing the previous femoral tunnel and using the same tibial tunnel

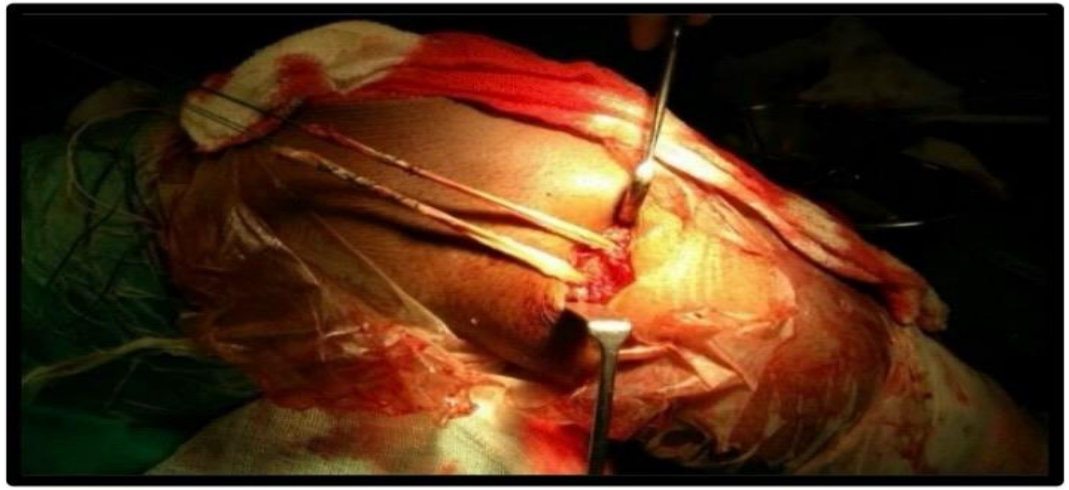
Clinical Photos Showing Patient's ability to squat & full ROM at knee.

Post op Xray

MODIFIED LEMAIRE'S EXTRA-ARTICULAR TENODESIS (LET)

Figure :- Harvesting a strip of Tensor fascia lata, cutting proximally while preserving distal insertion

Figure :- Fascia lata graft passed beneath the lateral collateral ligament (LCL)



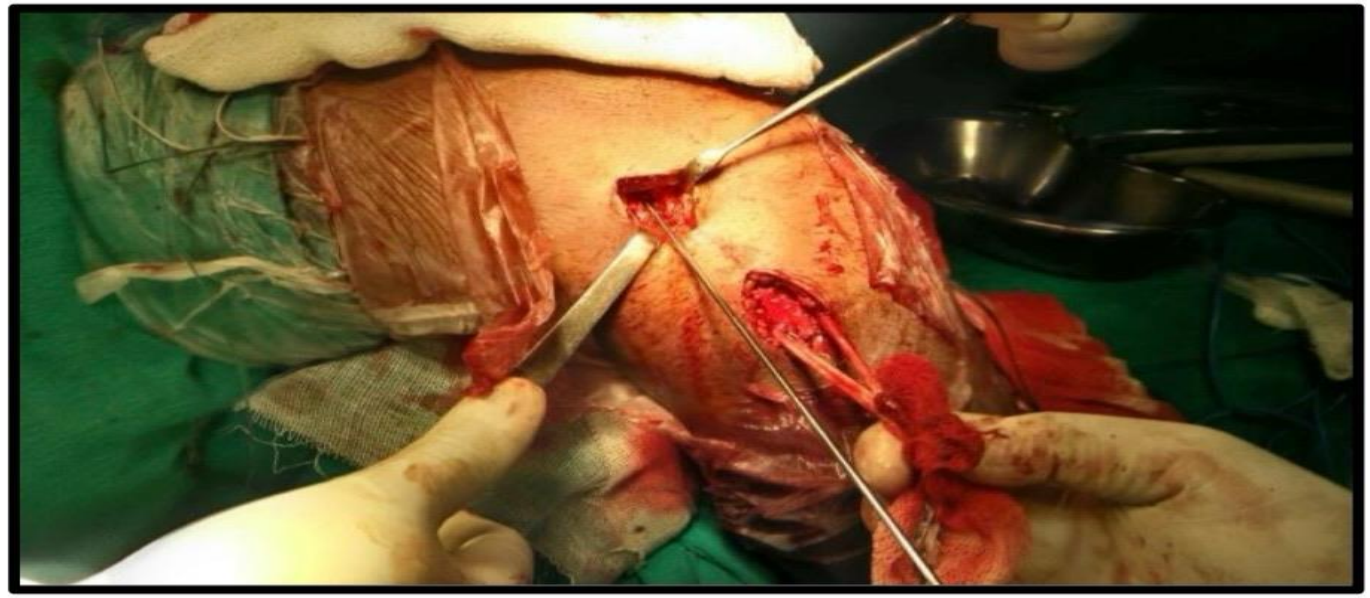
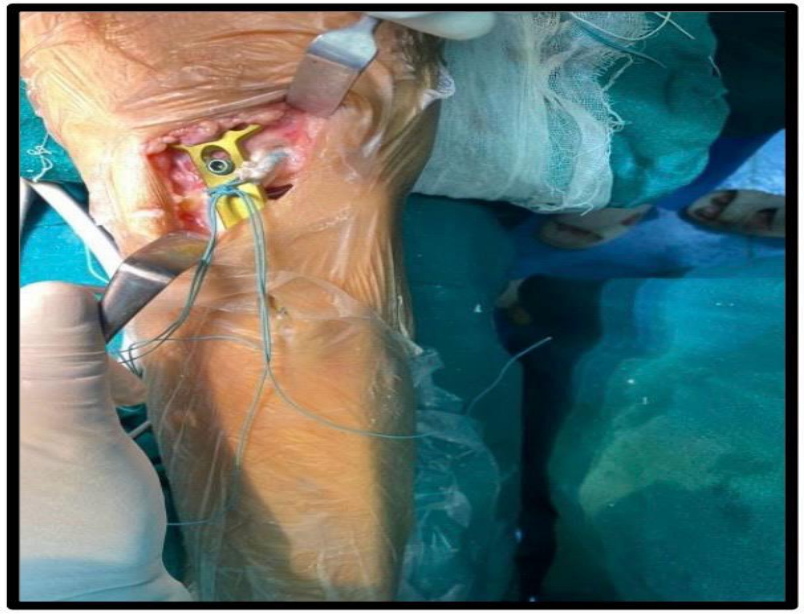


Figure :- PLC reconstruction using Larsons Technique



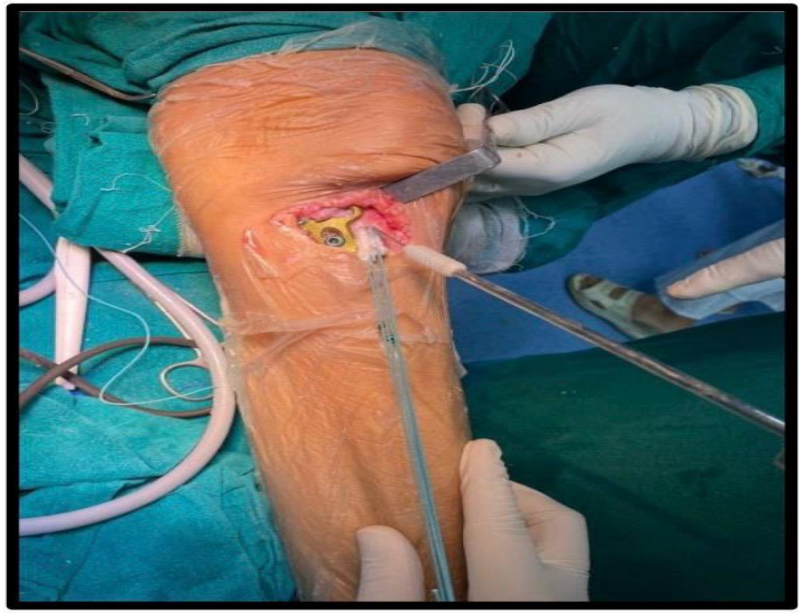


Figure :- Revision ACLR wih High Tibial Osteotomy

Pre op Xray

Post op Xray

RESULTS

- Mean Lysholm score: 92
- IKDC scores: Excellent to good
- Lachman score: Grade 1-2 in all cases
- Pivot shift: Negative in 19 patients
- 20% reduction in Tegner score; 10 patients ceased sports due to fear of reinjury.

CONCLUSION

- Revision ACLR often requires multiple concurrent procedures (e.g., Posterolateral reconstruction, HTO, Modified LeMaire anterolateral tenodesis).
- Thicker autografts such as Quadriceps tendon and Peroneus Longus provide better stability.
- Majority of patients regained function but with lower Tegner scores.

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