Delayed reconstruction of multiligament knee injury with arthritis in young post covid patient

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INTRODUCTION:

Multiligament knee injury (MLKI) are devastating injuries. They are defined as injuries to at least two of the four major ligaments in the knee:anterior cruciate ligament (ACL), posterior cruciate ligament (PCL), lateral collateral ligament (LCL) and medial collateral ligament (MCL). The reported incidence of these injuries to be around 0.02-0.20% of all orthopaedic injuries. Thus making it frequent missed injuries

REPORT:

30 years old male presented with left knee pain following motor vehicle accident. Clinically there was generalised laxity with tenderness over anterior right knee.Lachman, Posterior drawer test, Valgus & Varus stress test showed findings.MRI positive imaging revealed multiligament left knee injury Thus, he was planned for multilagement reconstruction of left knee with allograft. However, operation was delayed in view of covid infection and conducted 18 months later. Meanwhile patient has been referred to physiotherapist for quadriceps, VMO and hamstring exercises.

Surgery was proceed with single stage surgery. Multiligament knee reconstruction with allograft was done simultaneously, starting with PCL, ACL, LCL and MCL. Allograft (Achilles tendon sized 8x25mm).secured with bioscrew. Intraoperative findings showed osteoarthritic grade 3-4 with medial femoral chondral defect, complete tear ACL, PCL, LCL and MCL.Postoperatively, patient was protected using full length cast in 2 weeks, followed by PCL brace and delayed weight bearing 6 weeks.Patient is still under follow up and had been reviewed at 3 weeks, 6 weeks, 3 months and 4 months postoperatively

Figure 1:Shows preoperative Left knee MRI

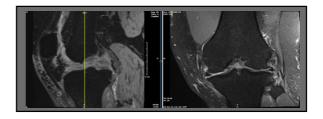


Figure 2: Shows postoperative left knee xray



Upon review at 6 months , patient was able to ambulate independently with no instability , full knee extension actively and flexion up to 100 degree. Patient was satisfied with outcome of the surgery and planned to return to sport 1 year post surgery

CONCLUSION:

Proper rehabilitation pre and post operative in MLKI injuries might have good functional outcome despite delayed operation in covid 19 infection

REFERENCES:

- 1. Gilbert M, Jorge C, Robert F, Las E. Diagnosis and treatment of multiligament knee injury:state of art, March 2017
- 2. Jimmy W G, Yulanda M, Fazal M Ali. Management of multiligament knee injuries, 2020