Retrospective Study Of Clinical And Functional Outcome Following Infected ACL Reconstruction.

INDIA

Dr.Chandrasekaran Gunasekaran
Dr.Thilak Jepegnanam
Dr. Roncy Savio Kuruvilla
CHRISTIAN MEDICAL COLLEGE, Vellore, Tamilnadu



Faculty Disclosure Information

Nothing to disclosure..... By presenting Author and his team

Dr.Chandrasekaran G

INTRODUCTION

 Postoperative infection is a rare but potentially devastating complication after anterior cruciate ligament reconstruction surgery (ACLRS).

• The incidence of postoperative infection after ACLRS has been reported to be between 0.1% and 2.4%. ¹





• Multiple factors including surgical technique, graft type, graft source, fixation technique, diabetes mellitus, smoking, intraarticular steroid injection, obesity, etc., have been reported as potential risk factors for postoperative infections.²





AIMS & OBJECTIVE

• The aim of the present study was to determine the incidence and risk factors of postoperative infection after arthroscopic ACLRS in the Indian population and to report the outcome of our treatment protocol.

• The study is a retrospective case series of 25 patients (male -22 and female-3) who underwent ACL reconstruction presented with post op infections.





Materials and Method

- All patients were referred from outside to our institution with complaints of pain/ instability or discharging sinus following ACL reconstruction. The mean age of patients 33.8 years. Duration of symptoms ranged from 4weeks to 6 months .(mean 3.2 months)
- All patients underwent debridement, graft removal and tunnels were filled with cement spacer. Cultures and Biopsy were sent and antibiotics were started bases on ID consult.





Results

organisms	Number
Coagulase negative staphylococci	6
Staph aureus	3
MRSA	3
Atypical Mycobacterium	3
Pseudomonas	5
Both Gram positive and Gram negative	4



RESULTS

- 4 patients underwent redebridement, 4 underwent revision ACL reconstruction following control of infection and 1 patient required flap cover for the tibial wound. The infection was successfully eradicated without further surgical treatment in 21 patients.
- Follow-up, at an average of 33 months, revealed that the patients had full symmetric knee range of motion and no effusion. The average Lysholm score was 67 points.





Conclusion:

• The goals of treatment for infection after anterior cruciate ligament reconstruction are, primarily, to protect the articular cartilage, graft removal in case of septic arthritis. Through early diagnosis and prompt treatment, the infection can be successfully eradicated, with stability of the knee and full range of motion achieved.³⁻⁵





Case example- 30 year male patient with infected acl with discharging sinus.







Post op after 6 months









REFERENCES

- 1. Babalola, O. R., Babalola, A. A. & Alatishe, K. A. Approaches to septic arthritis of the knee post anterior cruciate ligament reconstruction. *Curr. Rev. Musculoskelet. Med.* **16**, 274–283 (2023).
- 2. Bosco, F. *et al.* Advancements in anterior cruciate ligament repair—Current state of the art. *Surgeries* **5**, 234–247 (2024).
- 3. Li, Z. Efficacy of repair for ACL injury: A meta-analysis of randomized controlled trials. *Int. J. Sports Med.* **43**, 1071–1083 (2022).
- 4. Greenberg, D. D., Robertson, M., Vallurupalli, S., White, R. A. & Allen, W. C. Allograft compared with autograft infection rates in primary anterior cruciate ligament reconstruction. *J. Bone Jt. Surg. Am.* **92**, 2402–2408 (2010).
- 5. Torres-Claramunt, R. *et al.* Managing septic arthritis after knee ligament reconstruction. *Int. Orthop.* **40**, 607–614 (2015).





Thank you





