ACL in the Previously Infected Knee



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COI

Paid consultant Newclip Stryker Arthrex

huge fan of christopher marley

[Orthopaedic Surgery]

Infections in Anterior Cruciate Ligament Reconstruction

Charlton Stucken, MD,⁺ David N. Garras, MD,⁺ Julie L. Shaner, MD,⁺ and Steven B. Cohen, MD*⁺

Study (year)	Autograft infections/ Total (%)	Allograft infections/ Total (%)	
Barker et al (2010) ⁵	12 of 177 (0.44%)	6 of 1349 (0.68%)	
Indelli et al (2002) ³⁴	4 of 1400 (0.29%)	2 of 2100 (0.10%)	
Greenberg et al (2010) ²⁶	0 of 221 (0%)	0 of 640 (0%)	
Garras et al (2012) ²⁴	2 of 253 (0.79%)	4 of 535 (0.74%)	
Katz et al (2008) ³⁹	2 of 170 (1.2%)	4 of 628 (0.63%)	
Wang et al (2009) ⁶⁶	20 of 3978 (0.50%)	1 of 90 (1.11%)	
Crawford et al (2005) ²¹	0 of 41 (0%)	11 of 290 (3.8%)	
Total	40 of 7840 (0.51%)	28 of 5632 (0.49%)	Overall: 68 of 13,472 (0.50%)

> Arthroscopy. 2020 Aug;36(8):2231-2236. doi: 10.1016/j.arthro.2020.03.037. Epub 2020 Apr 15.

Presoaking of Semitendinosus Graft With Vancomycin Does Not Alter Its Biomechanical Properties: A Biomechanical In Vitro-Controlled Study Using Graft From Living Donors

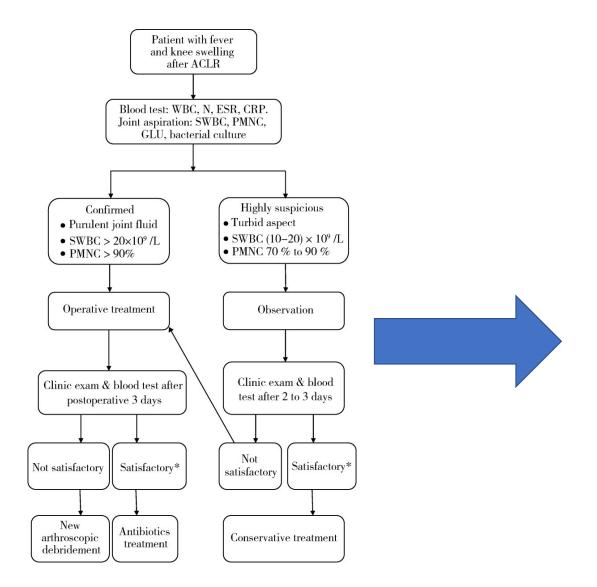
Christophe Jacquet ¹, Maxime Jaubert ¹, Charles Pioger ¹, Abderahmane Sbihi ¹, Martine Pithioux ¹, Marie Le Baron ¹, Akash Sharma ², Matthieu Ollivier ³

> *Editorial Commentary:* Vancomycin Soaking of the Graft in Anterior Cruciate Ligament Reconstruction: A Concept on the Way to Becoming the New Gold Standard

Check for updates

Thomas R. Pfeiffer, M.D.

NO COST / NO TIME TRICKs !!



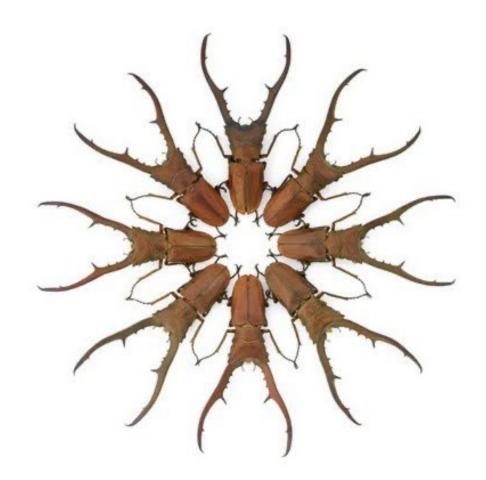
REVISION ACL ? PRIMARY ACL ?

EVIDENCE => NONE



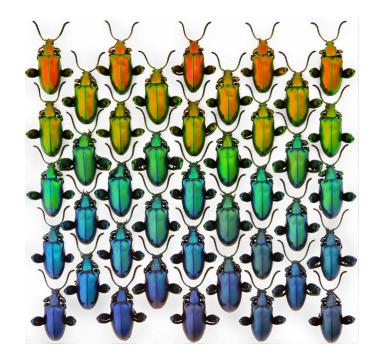
Previously infected => 5s

- Still (infected) ?
- Stiff ?
- Scar ?
- Specific Materials /Graft
- Status of cartilage ? Menisci ?



Still (infected) ?

Normal PCR at least 3 Mo after ATB No effusion Intra-op Samples +++++ Be sure to remove any harware or materials Resorbable sutures



If not sure => surgical sample prior to any surgery

Adapt => let's do an ACL

Samples prior to any prophylactic ATB Adapt prophylactic ATB to the bug(s) Soak your graft in adapted ATB

DO you really need / Want to return in ?



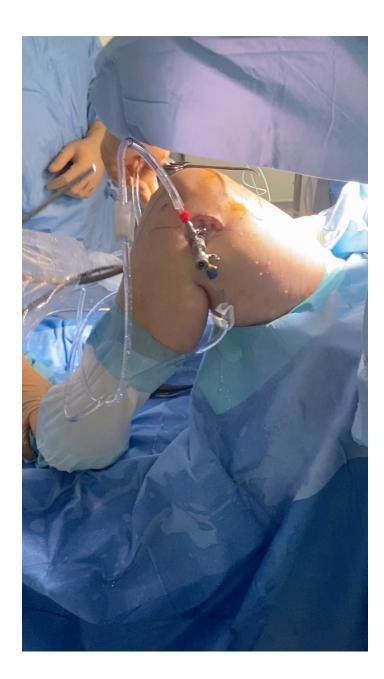
Adapt

Flexion <90°

- \Rightarrow Outside in femur
- \Rightarrow Debridement
- \Rightarrow Posterior approaches
- \Rightarrow Remove osteophyte and clear the notch

Avoid problems

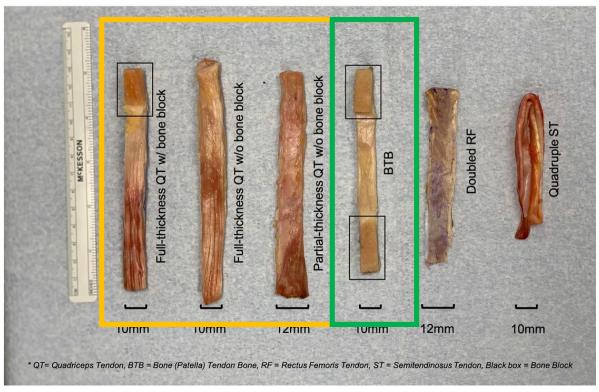
- \Rightarrow AUtograft
- \Rightarrow no synthetic material inside of the knee
- \Rightarrow Vandomycin +++



GRAFT and GRAFT FIXATION ?



chicagosportsdoc



Not a single wire inside !!!!

Double Cortical fixation ?

POST-OP

- Similar to revision ACL
- Based on associated lesion
- But be sure to have regular updates..



> Knee Surg Sports Traumatol Arthrosc. 2021 Dec 6. doi: 10.1007/s00167-021-06819-x. Online ahead of print.

Patients return to sports and to work after successful treatment of septic arthritis following anterior cruciate ligament reconstruction

Alexander Themessl ¹, Felix Mayr ¹, Kate Hatter ², Marco-Christopher Rupp ¹, Jonas Pogorzelski ¹, Andreas B Imhoff ³, Stefan Buchmann ^{1 4}

Affiliations + expand PMID: 34870732 DOI: 10.1007/s00167-021-06819-x

Outcomes ?

Not elite athletes anymore Comfortable knees

