What Knee Procedures are Patients Getting Within the First Three Years After ACL Reconstruction Surgery? #131

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Disclosure of interest information

No conflicts of interest to disclose.

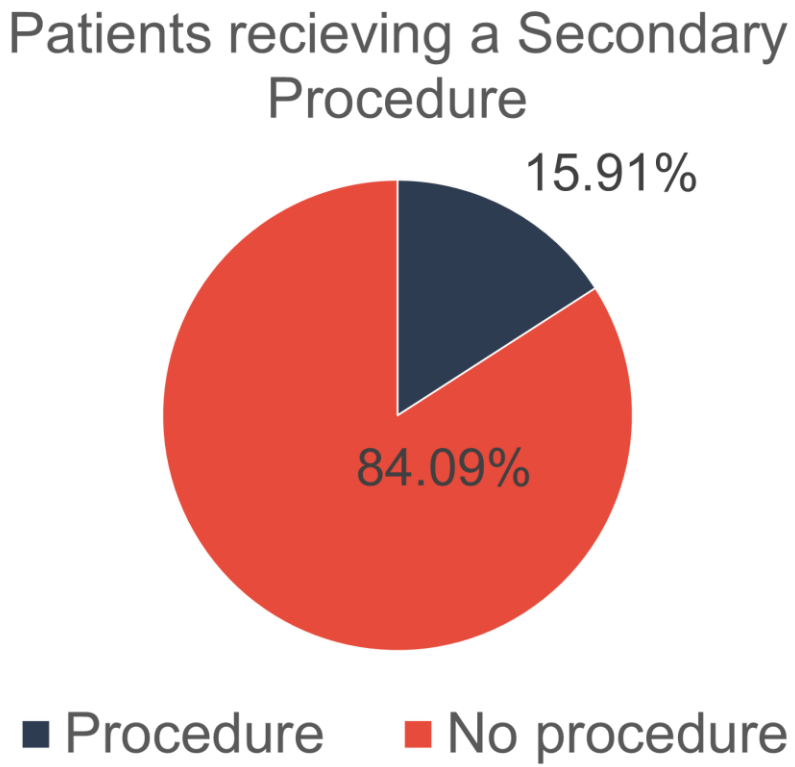
Objective

- Primary Purpose
  - Identify the percentage of ACL reconstruction patients who underwent a second surgical procedure within three years postoperatively.
- Secondary Purpose
  - Identify what procedures are most common in this population, and what risk factors affect the likelihood of secondary surgery.

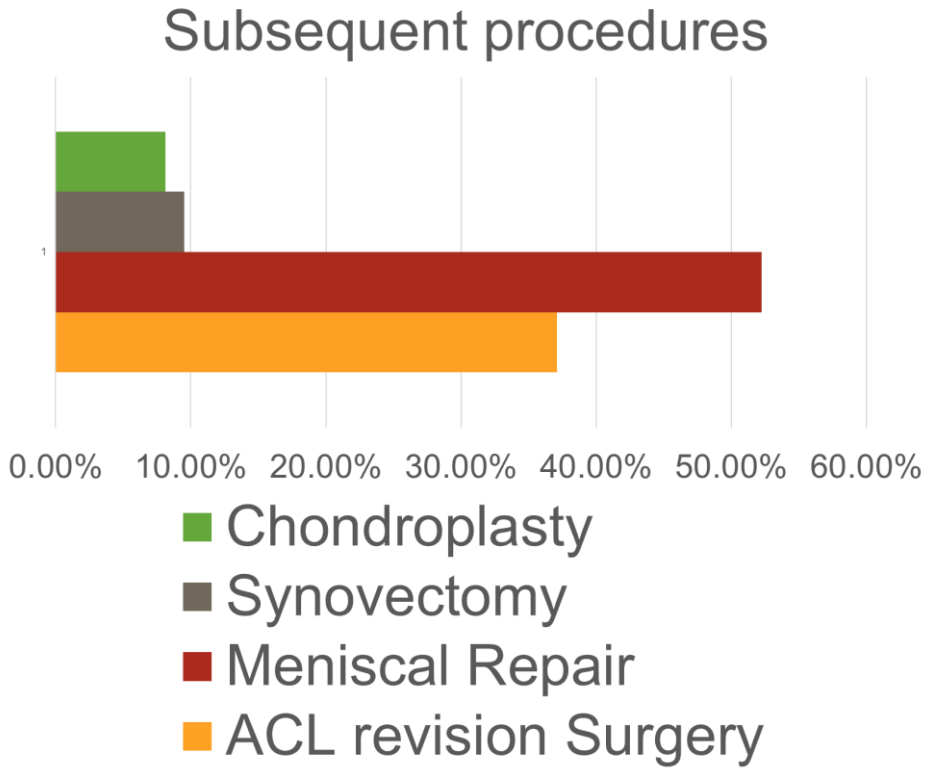
Materials and Methods

- This retrospective cohort study utilized a patient record database compiled by the Pearl Diver Program.
- Utilizing ICD-10 codes for sports physicals and for ACL reconstruction we were able to create a population of 8063 patients who had undergone an ACLR within one year of participating in sporting activities.
- With this population we identified postoperative surgical outcomes and risk factors in the three-year postoperative period.
- Subsequent surgeries were classified as any procedure involving the knee ligaments, menisci, or procedures focused on adhesion lysis.

Results



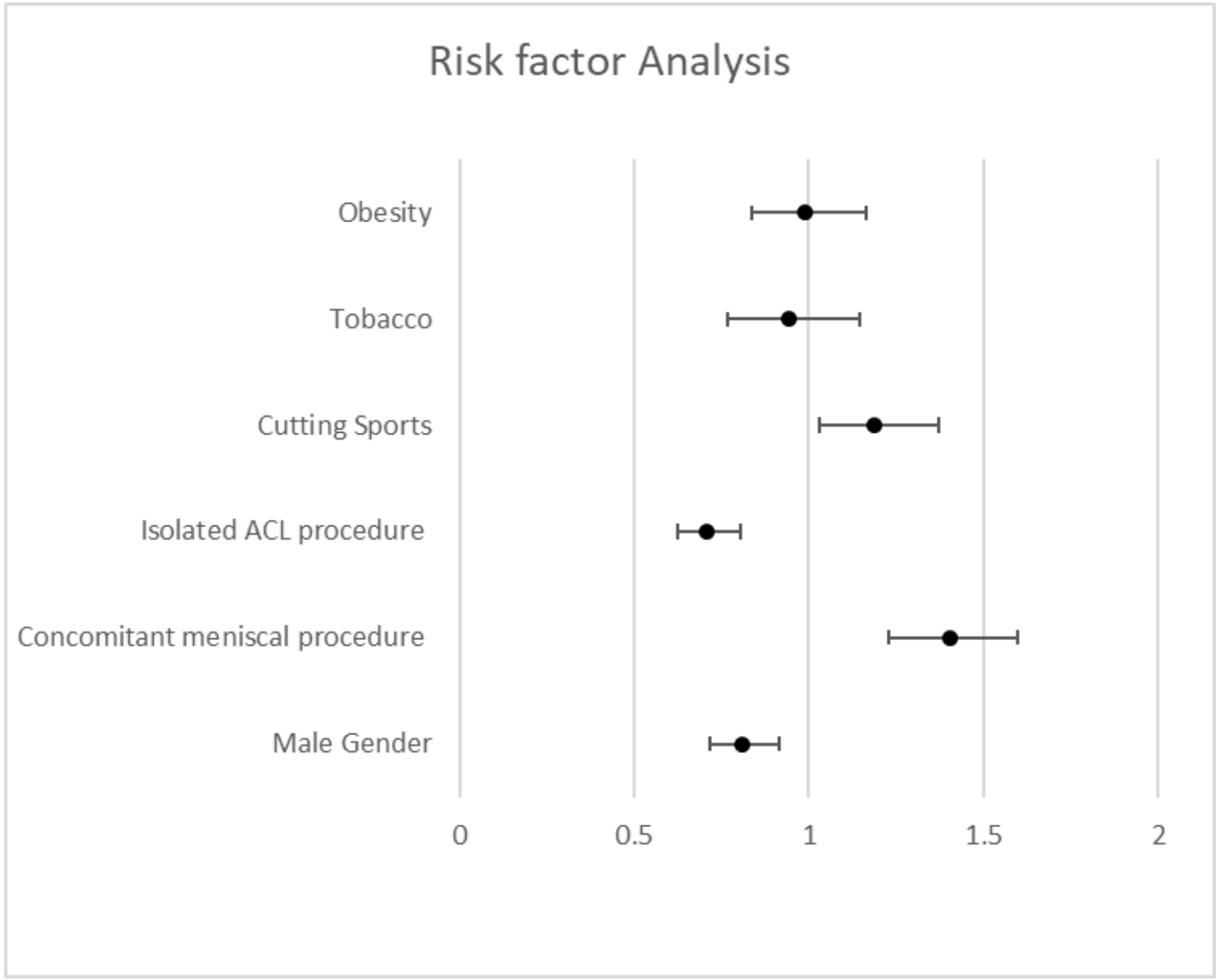
This graph depicts the proportion of secondary surgical procedures in a population of 8063 athletes within three years of initial ACL revision surgery.



All procedures listed above are percentages the 1283 patients who underwent a secondary procedure.

Results

- Risk factors represented as odds ratios.
- Concomitant meniscal procedure (OR 1.402, 2.5% CI 1.229, 97.5% CI 1.598)
- Isolated ACL procedure (OR 0.707, 2.5% CI 0.622, 97.5% CI 0.806)
- Cutting sports (OR 1.186, 2.5% CI 1.028, 97.5% CI 1.370)
- Male gender (OR 0.811, 2.5% CI 0.716 97.5% CI 0.916)



Conclusions and Significance

- Our results suggest that 15.9% of ACL reconstructions in young athletes will require a secondary ipsilateral surgical intervention within three years postoperatively.
- Additionally, we have shown that meniscal involvement at the time of injury and returning to some sports can increase the likelihood of subsequent procedures in athletes.

- Understanding the likelihood of secondary procedures and the increased risk when returning to cutting sports can assist in the decision-making process during the recovery period following an ACLR.
- Using this information, we believe that more informed decisions can be made regarding return to play by using data from an athlete specific population.