Return to School Following Orthopaedic Sports Medicine Procedures: A Prospective Study of Adolescents and Young Adults

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Disclosures

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  • I have no financial conflicts to disclose.

• Shelby R. Smith, BS
  • I have no financial conflicts to disclose.

• Christopher J. Hadley, BS
  • I have no financial conflicts to disclose.

• John P. Salvo, MD
  • I am a paid consultant for Stryker.

• Christopher C. Dodson, MD
  • I am a paid consultant for Arthrex Inc.

• Steven B. Cohen, MD
  • I am a paid employee of Zimmer Biomet and receive royalties from Slack, INC.

• Kevin B. Freedman, MD, MSCE
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Introduction

• Orthopaedic injuries, especially sports-related injuries, are relatively common among adolescents and college-aged individuals. It has been estimated that there are over 2.5 million emergency visits each year for sports-related injuries among individuals between the ages of 5 and 24 years.1

• While there has been extensive research on return to sports following orthopaedic surgery due to its implications for re-injury, there is a paucity of empirical evidence on return to school in adolescents and college students.

• The ability to return to school is an important consideration for this subset of the population as there is substantial literature indicating that school attendance is strongly correlated with academic performance.2

• For high school students who attend public school in the United States, there are an average of 180 in-session school days each year.3 Moreover, academic calendars at the college level tend to be even shorter.

• Sports medicine surgeons currently do not have sufficient empirical evidence at their disposal to counsel patients and parents regarding how soon after surgery patients should be expected to return to school.

• Therefore, we sought to determine mean time to return to school in adolescents and college students undergoing common sports medicine procedures, assess barriers to returning to school, and evaluate short-term academic performance following surgery.
Materials and Methods

- After obtaining IRB approval, patients between the ages of 14 and 25 were included in this prospective study if they were enrolled in school on a full-time basis and were undergoing any of the following procedures at our institution during the academic school year: anterior cruciate ligament (ACL) reconstruction, meniscectomy, meniscal repair, arthroscopic shoulder labral repair, and arthroscopic hip surgery (labral tears, femoroacetabular impingement, or chondral injuries).

- At 2 weeks postoperatively, patients were asked to complete a survey regarding time to return to school and barriers to returning to school.

- At 6 weeks and 12 weeks postoperatively, patients were asked to complete another survey inquiring about difficulties faced upon returning to school and their academic performance following surgery.
Results

- From September 2017 – December 2018, 101 eligible patients (48.6% female, 51.5% male) with a mean age of 18.7 years (14.6 - 24.9 years) were prospectively enrolled in this study.

- In our sample, 58.8% of patients were enrolled in middle/high school and 41.2% were enrolled in college. The survey response rates were 74.2% at 2 weeks, 68.0% at 6 weeks, and 41.2% at 12 weeks.

- The procedures performed included ACL reconstruction (54.5%), ACL reconstruction with concomitant meniscal repair (7.9%), arthroscopic shoulder labral repair (19.8%), arthroscopic hip labral repair (9.9%), and partial meniscectomy or meniscal repair (7.9%).

- The mean number of days, including weekends, to return to school after surgery are presented below in Figure 1.

- The top 3 cited barriers for failing to return to school sooner were: not feeling ready to return, pain, and restricted mobility.

- At 6 weeks postoperatively, 7.1% of patients reported failing an exam within the 6 months prior to surgery and 14.3% of patients reported failing an exam after their surgery (P = 0.097). Moreover, 13.3% of patients felt the timing of their surgery negatively impacted their school performance.
Results

- Hip Labral Repair: Middle/High School 9.6, College 9.5, All Grade Levels 9.6
- ACLR: Middle/High School 8.2, College 6.5, All Grade Levels 7.4
- ACLR + Meniscal Repair: Middle/High School 7.0, College 5.5, All Grade Levels 6.6
- Shoulder Labral Repair: Middle/High School 4.9, College 4.5, All Grade Levels 4.8
- Meniscal Surgery: Middle/High School 4.0, College 4.5, All Grade Levels 4.3

Source: Sidney Kimmel Medical College at Thomas Jefferson University

Rothman Institute
Discussion

• Patients who underwent ACL reconstruction and hip labral repair required seven days or more, on average, to return to school following surgery.

• In addition, subjective short-term academic performance was impacted in only a minority of students, although self-reported preoperative and postoperative exam failure rates did not differ significantly.

• Our findings provide empirical evidence for estimating time to return to school following common sports medicine procedures.

• Surgeons can utilize this information to counsel adolescent and college-aged patients and their parents appropriately.


THANK YOU.