Postoperative Opioid Usage Following Outpatient Arthroscopic Sports Medicine Procedures

Shelby R. Smith, BS, Christopher J. Hadley, BS, William Emper, MD, Christopher M. Aland, MD, Kevin B. Freedman, MD, MSCE, John P. Salvo, MD, Sommer Hammoud, MD
Disclosures

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

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

• William Emper, MD
  • I have no financial conflicts to disclose.

• Christopher M. Aland, MD
  • I receive stock options from Arthrocare and Johnson & Johnson.

• Kevin B. Freedman, MD, MSCE
  • I am a paid consultant for DePuy, A Johnson & Johnson Company and Vericel.

• John P. Salvo, MD
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  • I receive stock options from Johnson & Johnson and research support from Arthrex, Inc.
Introduction

• The United States is currently in what many have termed an “epidemic” state regarding opioid usage (1-3).

• Orthopaedic surgeons rank as the fifth highest prescribers of opioids in patients aged 30-39, and the third highest prescribers in patients greater than 40 years old (4).

• Recent literature reporting opioid consumption stated 92% of patients had leftover opioid pills following common surgical procedures. Further, the number of pills prescribed was significantly higher than patient-reported opioid consumption (5).

• To combat the number of opioid pills available for misuse, abuse or diversion, orthopaedic surgeons have begun prescribing less opioids. Additionally, in a recent survey, only 30% of orthopaedic surgeons reported prescribing refills on opioid prescriptions with many of these refills reserved for major procedures and fractures (6).

• There is a paucity of literature examining the quantity of opioids prescribed following common orthopaedic sports procedures as well as the average number of opioid pills consumed and the amount remaining after discontinuation.

• The purpose of this study was to report average opioid consumption after common sports medicine outpatient orthopaedic procedures and the number of opioid pills patients had remaining.
Materials and Methods

• Patients between the ages of 15 to 40 years old that underwent outpatient arthroscopic orthopaedic procedures were prospectively enrolled from June 2017 – December 2018.

• Patients undergoing elective surgeries including ACL reconstruction, meniscectomy, meniscal repair, shoulder labral repair, or hip surgery (for repair of labral tears, femoroacetabular impingement, or chondral injuries) were prospectively enrolled from June 2017 – December 2018.

• Online surveys were distributed to record the number of pills consumed daily between the day of surgery through post-op day 14.

• Patients were asked to complete a final survey, post-op day 21, that asked the number of opioid pills they had remaining, and what they intended to do with remaining pills, if applicable.
Results

- The overall average number of opioid pills consumed was 12.76 (range 0 – 56 pills), with the majority consumed the day after surgery at an average of 3.37 pills (Table 1). Of the 74 patients, only 9 (12.2%) patients reported having consumed opioid pills between days 15 and 21 after surgery.

- Patients had an average of 11.21 opioid pills remaining at the final follow-up, 21 days after surgery.

- Additionally, patients intended to do the following with their remaining opioid pills: I do not have pills remaining (n=9), keep them for potential use (n=13), throw them away in the trash (n=7), flush them down the toilet (n=8), give them to someone who needs them (n=0) and dispose of them in some other way (n=9).

- For those patients who selected to dispose of their remaining pills in some other way, six intended to drop them off at a police station, two intended to return them to their doctor and one intended to return them to their pharmacy.
## Results

<table>
<thead>
<tr>
<th>Type of Procedure</th>
<th>Number of Patients</th>
<th>Average Age</th>
<th>Number of Pills Prescribed</th>
<th>Average Number of Opioid Pills Consumed (Range)</th>
<th>Average Number of Opioid Pills Remaining (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACL Reconstruction</td>
<td>31</td>
<td>26.30</td>
<td>50</td>
<td>16.87 (0 – 56)</td>
<td>12.59 (0 – 46)</td>
</tr>
<tr>
<td>Hip-labrum</td>
<td>19</td>
<td>27.25</td>
<td>30</td>
<td>12.21 (0 – 30)</td>
<td>14.04 (0 – 30)</td>
</tr>
<tr>
<td>Meniscectomy</td>
<td>10</td>
<td>26.81</td>
<td>20</td>
<td>2.30 (0 – 9)</td>
<td>10.43 (0 – 20)</td>
</tr>
<tr>
<td>Meniscus Repair</td>
<td>5</td>
<td>24.30</td>
<td>10-40</td>
<td>4.25 (0 – 10)</td>
<td>N/A</td>
</tr>
<tr>
<td>Shoulder-labrum</td>
<td>9</td>
<td>28.00</td>
<td>40</td>
<td>12.11 (0 – 40)</td>
<td>13.60 (0 – 40)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74</strong></td>
<td><strong>26.77</strong></td>
<td><strong>12.76</strong></td>
<td><strong>11.21</strong></td>
<td></td>
</tr>
</tbody>
</table>

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Rothman Institute

Sidney Kimmel Medical College at Thomas Jefferson University
Discussion

• The results of our study indicate that following common orthopaedic sports medicine surgical procedures, patients on average have a large number of opioid pills remaining 3 weeks after surgery (11.21 pills).

• A small portion of patients (17.6%) indicated they intended to keep their additional opioid pills for future use.

• By presenting the current patterns of postoperative opioid consumption, surgeons can utilize this information to evaluate their current opioid prescribing protocols.


THANK YOU.