Opioid Analgesics Are Not Required After Anterior Cruciate Ligament Reconstruction

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INTRODUCTION:

Opioid medications are associated with significant side effects and abuse potential. Minimizing exposure to opioids while maintaining adequate pain control is a goal across surgical specialties. This study sought to examine whether opioid medications were necessary for adequate analgesia following anterior cruciate ligament reconstruction (ACLR).

METHODS: All patients undergoing ACLR were enrolled in a patient-reported outcomes database. Patients under 40 years of age at the time of surgery were included in this study. Prior to the initiation of opioid-free ACLR, patients underwent ACLR with an opioid sparing protocol consisting of adductor canal blockade, cryotherapy, physical therapy within three days, acetaminophen, gabapentin, ketorolac, 30 pills of oxycodone 5 mg and office education. After initiation of opioid free ACLR, the same protocol was used, but opioid prescription was removed. All patients were counseled that a rescue opioid prescription would be issued if adequate analgesia was not obtained without opioids. All patients underwent ACLR by a single surgeon, fellowship-trained in sports medicine. Patients were assessed pre-operatively and at two weeks, six weeks, three months, six months and one year post-operatively. Pain was assessed by Visual Analog Scale (VAS). Need for opioid medication and quantity of opioid consumption was assessed at two weeks post-operatively.

RESULTS:

Nineteen patients underwent ACLR with a standard protocol including opioid prescription. Average visual analog score (VAS) preoperatively was 2.65. Average VAS at two weeks postoperatively was 3.28. Fourteen patients underwent ACLR without any opioids prescribed, using otherwise the same protocol. Average visual analog score (VAS) preoperatively was 3.3. Average VAS at two weeks postoperatively was 1.46. No patients required a rescue opioid prescription.

DISCUSSION AND CONCLUSION:

This study serves as proof of concept that opioids are not required after primary ACLR in young patients. Patients with access to opioid prescription did not seek rescue opioids at any point in the study period.