The efficacy of regional anesthesia for outpatient anterior cruciate ligament reconstruction.

Reference List


Abstract: Arthroscopically assisted anterior cruciate ligament (ACL) reconstruction is a common orthopaedic procedure. Until recently, the majority of these procedures have been performed on an inpatient basis. This retrospective study evaluated 67 consecutive patients who underwent an arthroscopically assisted, autogenous bone-patellar ligament-bone ACL reconstruction that was supervised by the same surgeon. General endotracheal anesthesia was used for 36 patients and a femoral sciatic nerve block was used in 31 patients. Only patients who underwent either isolated ACL reconstructions, or those combined with either medial or lateral meniscectomies, were included. No statistically significant differences in either the mean anesthesia time or operative time existed between the general anesthesia and regional anesthesia groups. Patients receiving regional anesthesia did require a significantly longer recovery room stay than those who received general anesthesia. Most of the patients who received general anesthesia had inpatient procedures. In the general anesthesia group, 31 of 36 patients spent at least one night in the hospital. Three of 30 patients who received regional anesthesia required hospital admission. There were no differences between anesthesia-related complication between groups. The cost saving of performing ACL reconstructions under regional anesthesia compared with general anesthesia was calculated to be $2,907 per case and predominantly reflected the outpatient approach used in these cases. This study supports the use of femoral sciatic nerve block anesthesia as a safe and reliable alternative to general anesthesia for patients undergoing outpatient ACL reconstruction. The use of this technique was not found to compromise operating room efficiency. Patients receiving regional anesthesia did require a slightly longer recovery room stay. ACL reconstruction performed under regional anesthesia with same-day discharge was well tolerated by our patients and it provides a cost-efficient alternative to ACL reconstructions performed as inpatient procedures.