Efficacy Of Intraoperative, Intraarticular, Drug Cocktail Injection After Anterior Cruciate Ligament Reconstruction: A Randomised Controlled Study

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Mandatory Faculty Disclosures

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- Conflict of interest declared: None

Introduction

- ACL Reconstruction surgery is frequently associated with significant amount of pain in the immediate post operative period.
- Early postoperative rehabilitation is negatively affected by postoperative pain leading to a less than satisfactory outcome.
- The use of post operative drug cocktail injection is a well-established and widely followed practice after total knee replacement, however its use after an ACL reconstruction surgery in not common

Objective of the study

- To establish the efficacy of intraoperative, intraarticular, drug cocktail injection [IIDCI] following single bundle anterior cruciate ligament reconstruction using ipsilateral hamstring tendons.
- Randomized control trial comparing the efficacy of IIDCI in ACLR and compared that with equal number of patients who did not get the IIDCI after an ACLR.

Methods

Thirty patients in each group

VAS scores at 6, 12, 18, 24 hours after surgery assessed

Post op recovery: IKDC and Tegner Lysolm Scores at 4, 8, 12, 24 and 48 weeks after surgery.

Other parameters that were assessed

- Time to first analgesic request
- Postoperative consumption of IV tramadol
- Postoperative complications such as nausea, vomiting, sedation etc

Results

- **VAS scores were significantly better in the IIDCI group at 6 hours, 12 hours and 18 hours after surgery [p value <0.05].**

- **The scores became comparable by 24 hours after the surgery.**

IIDCI: Intraoperative, Intraarticular, Drug Cocktail Injection

Results

- **Post operative functional recovery was better in the IIDCI group at 4 weeks and 8 weeks after surgery [p value <0.05] and becomes comparable from 12 weeks onwards.**

IIDCI: Intraoperative, Intraarticular, Drug Cocktail Injection

Discussion

- **Less pain in the immediate perioperative period results in improved functional outcomes in the post operative period.**
- **Our study data mirrors what is seen in joint replacement studies where IIDCI groups do better in perioperative pain scores and post operative functional recovery.**

IIDCI: Intraoperative, Intraarticular, Drug Cocktail Injection

Conclusion

IIDCI following ACL Reconstruction surgery is a useful tool to reduce pain in the immediate post operative period. It also results in better functional recovery.

IIDCI: Intraoperative, Intraarticular, Drug Cocktail Injection

References

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