A Prospective Randomized Study Analyzing the Effect of Preoperative Opioid Counseling on Postoperative Opioid Consumption after Hand Surgery

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INTRODUCTION:
Prescription opioid abuse has become increasingly prevalent in the United States. Opioid counseling has been proposed to decrease opioid consumption after surgery. This study aimed to evaluate the effect of preoperative opioid counseling on patients’ pain experience and opioid consumption in hand surgery, using a carpal tunnel release (CTR) model. A hypothesis was made that patients receiving preoperative opioid counseling would use less of their prescribed opioid and terminate its use sooner as compared to patients who do not receive any counseling.

METHODS:
A prospective randomized comparison of consecutive patients scheduled to undergo CTR surgery was conducted. Patients were randomized to either receiving formal preoperative opioid counseling or no counseling. All operations were performed with the same mini-open CTR surgical technique and the same number of opioids were prescribed postoperatively. Daily opioid pill consumption, pain levels, and any adverse reactions were recorded. Pre-study power analysis indicated that a minimum of 20 patients were needed in each group, which was achieved.

RESULTS:
On the day of surgery, patients in the group with counseling reported significantly fewer prescribed opioid pills consumed, 0.65 versus 1.90, compared to patients in the group without counseling (p<0.05), while experiencing no significant different in pain level experience. The same was found on the first postoperative day, patients in the group with counseling reported significantly fewer prescribed opioid pills consumed, 0.45 versus 1.50, compared to patients in the group without counseling (p<0.05), again with no significant difference in pain level experience. In addition, patients in the group with counseling reported a significantly lower number of total pain pills consumed over the course of the study than the group without counseling, 1.40 vs. 4.20 (p<0.05). No major adverse reactions were noted in either group.

DISCUSSION AND CONCLUSION:
Preoperative opioid counseling was found to result in a significant decrease in overall opioid consumption postoperatively. Surgeons should consider routine preoperative counseling of their patients to help minimize opioid use and potentially theoretical opioid abuse or diversion. Surgeons should also consider recommend prescribing no more than 5-10 opioids postoperatively after CTR surgery.