

## Paper #63

# Do Relaxation Exercises Decrease Postoperative Pain After Rotator Cuff Repair?: A Randomized Controlled Trial

Steven B. Cohen, MD, UNITED STATES  
Danielle Weekes, MD, UNITED STATES  
Richard E. Campbell, MD, UNITED STATES  
Christopher J. Hadley, BS, UNITED STATES  
Zaira S. Chaudhry, MPH, UNITED STATES  
Matthew D. Pepe, MD, UNITED STATES  
Bradford Tucker, MD, UNITED STATES  
Kevin Freedman, MD, UNITED STATES  
Fotios P. Tjoumakaris, MD, UNITED STATES

Rothman Orthopaedic Institute  
Philadelphia, PA, UNITED STATES

### Summary:

The use of relaxation techniques can provide an easy to implement, non-pharmacologic strategy, to significantly decrease opioid consumption following arthroscopic rotator cuff repair.

### Abstract:

## Introduction

During the last decade, there has been an increasing interest within orthopedic surgery to decrease reliance on narcotics for pain management. Non-pharmacologic interventions, such as education, can decrease narcotic consumption after arthroscopic rotator cuff repair (ARCR). Another non-pharmacologic intervention, the use of relaxation exercises, has been promoted for pain management; however, its' effect has not been investigated following ARCR. The purpose of this investigation was to evaluate the effects of relaxation exercises on post-operative pain and narcotics use after ARCR.

## Methods

This was a prospective, randomized, controlled trial evaluating 151 consecutive patients undergoing ARCR. The study group (n: 75) received education materials including a 5 minute video explaining relaxation breathing techniques, while the control group (n: 75) received no relaxation education. Both groups received standardized post-op care including oxycodone/acetaminophen, and cryotherapy. Patients recorded a 5-day journal of their pain level and opioid consumption. Patients were then queried with ASES and SANE questionnaires pre-operatively, and 2, 6, 12, 18, and 24 weeks post-operatively.

## Results

Ninety-five percent of patients completed the follow-up survey. Sixty-three percent (43/68) of study group patients reported that the relaxation techniques decreased their pain levels, while 37% said that it had no effect on their pain. However, there were no significant differences between the study and control groups in post-op pain measures on any post-op day (1-5),  $p > 0.05$ . At two weeks post-op the study group consumed significantly less narcotics than the control group (avg. 21.7 doses vs. 29.7,  $p = 0.016$ ), and 51% were still performing the relaxation techniques. There were no significant differences in ASES and SANE scores at each time point throughout the study period.

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### Conclusion

While the effect on post-op pain is uncertain, relaxation techniques can provide an easy to implement, non-pharmacologic strategy to significantly decrease narcotics consumption after ARCR.