

Title:	Arthroscopic versus min-open repair of full-thickness tears of the rotator cuff—a prospective randomized study
Research Category:	Category 1: occupational disease, injury and health services
Issue/rationale:	Work-related injuries to the shoulder (primarily injuries to the rotator cuff) rank second only to back and neck disorders in frequency. Recently, the introduction of arthroscopic rotator cuff repair techniques has advanced the treatment of rotator cuff tears. However, the outcome of arthroscopic rotator cuff repair has never been studied in comparison to standard open or mini-open rotator cuff repair in a prospective, randomized trial.
Objectives:	The purpose of this research is to determine if either mini-open or arthroscopic repair of full thickness rotator cuff tears results in improved quality of life for patients post-operatively. The specific research question is: Is there a difference in the quality of life of patients who undergo arthroscopic rotator cuff repair versus mini-open rotator cuff repair two years following surgery? The primary goal of this research is to determine which surgical procedure results in the greatest improvement of quality of life scores for the patients post-operatively.
Anticipated Results/Impact:	Using the minimally invasive approach of arthroscopy, even large and massive rotator cuff tears may be repaired. Advantages of the arthroscopic technique for full thickness rotator cuff repair include preservation of the deltoid origin, shortened hospital stay, improved cosmesis, and accelerated rehabilitation. Due to these advantages for the patient, we anticipate that patients who undergo the arthroscopic repair will have 10 per cent more improvement in their quality of life score as compared to patients who undergo the mini-open repair. If this hypothesis is correct, arthroscopic repair for full thickness rotator cuff tears can be utilized in the future with the greatest potential for producing positive clinical and return to work outcome results for the patient. By determining which surgical procedure results in the greatest increase in quality of life post-surgically, surgeons and patients will be able to select the most appropriate procedure (mini-open versus arthroscopic repair) for each individual.
Keywords:	Arthroscopic, rotator-cuff
Investigators:	Ian Lo, University of Calgary
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