

RESEARCH PROGRAM

| Research Project Details | |
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| Title | Graft Reconstruction for "Irreparable" Rotator Cuff Tears: Superior Capsule Reconstruction vs. Tendon Repair with Graft Bridging |
| Investigator(s) | Dr. Ian Lo, University of Calgary |
| Funding Period | August 2016 – December 2018 |
| Budget | \$29,440 |
| Issue/Rationale | The treatment of massive irreparable rotator cuff tears without arthritic change remains an extremely controversial condition. To date, there is no widely accepted treatment option for these tears. The general principle when performing any rotator cuff repair is to focus on the anatomic reattachment of the torn tendons to the greater tuberosity. However, in massive irreparable tears there is inadequate mobility of the tendon (precluding repair) and the tissue quality of the remaining tendon is poor. This has led to the development of a variety of graft materials to “repair” the torn tendons of the rotator cuff by spanning the defect between the retracted rotator cuff tendon and the greater tuberosity. This effectively bridges the defect and several authors have now reported good clinical results and acceptable healing rates. Recently, an alternative option for surgical treatments of irreparable rotator cuff tears has been introduced. This procedure, called “superior capsular reconstruction,” does not repair the tendon to the bone, but alternatively uses a graft to span the defect between the superior glenoid and the greater tuberosity. |
| Objective(s) | While the superior capsule reconstruction appears to be a promising surgical procedure, its long-term durability is unclear and there are no comparison trials to “standard” treatment (i.e. rotator cuff repair which bridges the tendon defect). This study will be the first such randomized controlled trial. |
| Anticipated Results/ Impact | Although the number of workers who suffer irreparable tears may not be extremely high, the long-term impact of their ongoing disability is significant. A better understanding of this novel repair technique could certainly have enormous impact on the treatment of/surgical options available to injured workers. |
| Keywords | Rotator cuff injury, irreparable tears, superior capsule reconstruction, randomized controlled trial, surgical treatment |