

INCLUSION Criteria

- Age ≥ 50 years to < 85 years
- Shoulder pain and/or loss of active motion, strength or function
- MRI-confirmed, partial- or full-thickness supraspinatus and/or infraspinatus tear of 4 cm or less in longitudinal dimension
- Medically fit for surgery – Category I-III per ASA Physical Status classification (see *TABLE 1: Fitness for Surgery*)
- Ability and willingness to provide informed consent

EXCLUSION Criteria

Pre-MRI Exclusion Criteria

- Primary diagnosis something other than a rotator cuff tear
- Acute rotator cuff tear caused by a severe trauma (see *TABLE 2: Trauma Classification*)
- Previous rotator cuff surgery on affected side
- History (in last 2 years) of shoulder fracture involving the humeral head on affected side
- Shoulder used as a weight-bearing joint
- Contraindication to MRI (*claustrophobia, pacemaker, pregnancy, shoulder implant, etc.*)
- Severe problems with maintaining follow-up expected (*history of substance abuse, homelessness/incarceration, dementia, brain injury, or psychotic disorders, etc.*)
- Non-English speaking (*questionnaires only validated in English*)

Post-MRI Exclusion Criteria

- Glenohumeral osteoarthritis on x-rays/MRI
- Grade 4 fatty infiltration of rotator cuff (*any tendons*)
- Candidate for reverse shoulder arthroplasty or total shoulder arthroplasty at baseline
- Isolated subscapularis &/or teres minor tear on affected side

TABLE 1: Fitness for Surgery

Fit for Surgery

- I. Normal healthy patients
- II. Patients with mild systemic disease
- III. Patients with severe systemic disease (*no immediate danger of death*)

Unfit for Surgery

- IV. Patients with severe systemic disease that is a constant threat to life (*possible danger of death*)
- V. Moribund patients who are not expected to survive without the operation
- VI. A declared brain-dead patient whose organs are being removed for donor purposes

TABLE 2: Trauma Classification

Low Velocity Trauma

- Falls from standing height or less
- Minimal trauma other than a fall (e.g., turning over in bed)
- Moderate trauma other than a fall (e.g., collisions w/ objects or another person during normal activities)

Severe Trauma

- Falls from greater than standing height (e.g., *falls while standing on a ladder, chair, porch, table, steps, or other raised surface*)
- Motor vehicle crashes
- Struck by vehicle or other fast moving projectile (e.g., *bullet, baseball, etc.*)
- Assault (i.e., *injuries intentionally inflicted by another person*)