

The Biomechanical and Histological Processes of Rerouting Biceps to Treat Chronic Irreparable Rotator Cuff Tears in a Rabbit Model

Appendix

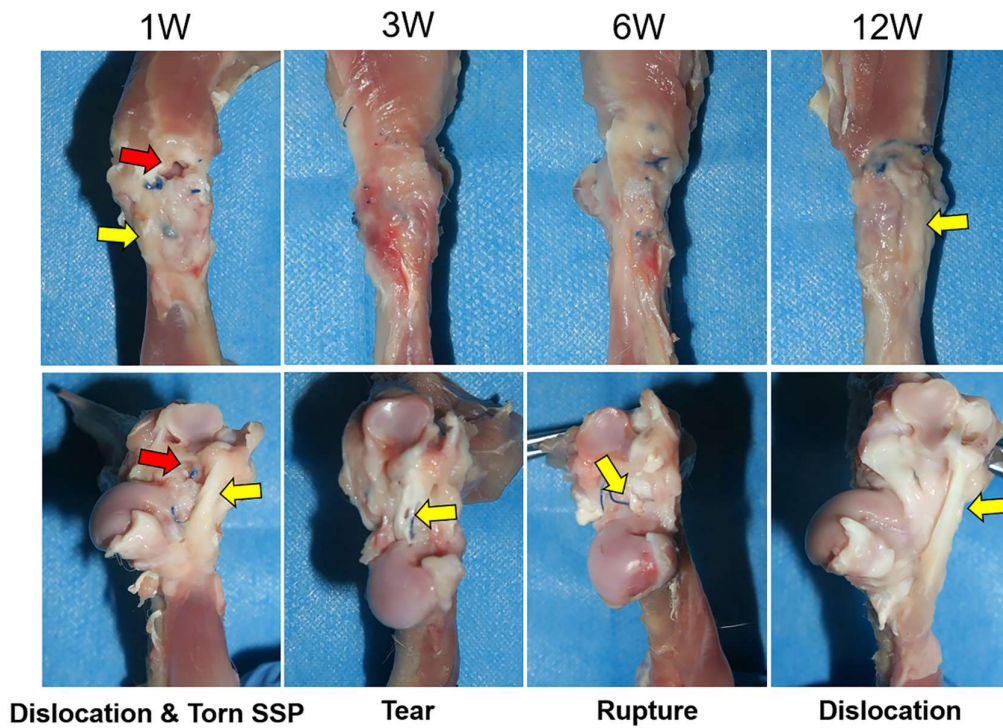


Figure A1. The complications occurred after biceps was rerouted. Red arrows were failure sites of SSP tendon and the yellow ones were failure sites of biceps. SSP, supraspinatus.

TABLE A1. Failure Modes of Intra-articular portions of Rerouting-biceps

| | 1W | 3W | 6W | 9W | 12W | NSC |
|------------------------------|----|----|----|----|-----|-----|
| Midsubstance rupture | 0 | 0 | 3 | 5 | 6 | 6 |
| Full-out failure from groove | 6 | 6 | 3 | 1 | 0 | 0 |

NSC, native superior capsule.

TABLE A2. Failure Modes of Extra-articular Portions of Rerouting-biceps

| | 1W | 3W | 6W | 9W | 12W | NB |
|------------------------------|----|----|----|----|-----|----|
| Midsubstance rupture | 0 | 2 | 4 | 5 | 6 | 0 |
| Full-out failure from groove | 6 | 4 | 2 | 1 | 0 | 0 |
| Bone avulsion fracture | 0 | 0 | 0 | 0 | 0 | 6 |

NB, native biceps.

TABLE A3. Failure load and Stiffness of Intra-articular Portions of Rerouting-biceps

| | 1W | 3W | 6W | 9W | 12W | NB |
|------------------|-----------------|-----------------|-------------------|------------------|------------------|------------------|
| Failure load (N) | 2.35 ± 1.50 | 6.33 ± 4.68 | 38.33 ± 10.46 | 63.83 ± 5.46 | 65.50 ± 8.78 | 22.83 ± 3.90 |
| Stiffness (N/mm) | 2.13 ± 0.86 | 7.17 ± 3.87 | 13.33 ± 3.50 | 31.67 ± 4.18 | 38.00 ± 4.90 | 13.83 ± 2.14 |

NSC, native superior capsule.

TABLE A4. Failure load and Stiffness of Extra-articular Portions of Rerouting-biceps

| | 1W | 3W | 6W | 9W | 12W | NB |
|------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| Failure load (N) | 2.13 ± 1.80 | 7.33 ± 2.42 | 42.33 ± 5.96 | 62.33 ± 7.69 | 69.33 ± 6.98 | 51.67 ± 3.27 |
| Stiffness (N/mm) | 2.33 ± 1.91 | 6.83 ± 6.82 | 13.16 ± 6.27 | 32.33 ± 6.50 | 39.67 ± 4.27 | 21.17 ± 2.86 |

NB, native biceps.