Endoscopic vs Open Trigger Finger Release: The Experience of a High-Volume Multi-Center Group Utilizing a Minimally Invasive Approach

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Introduction

- Trigger finger is a very common finger ailment
- Traditional open release, while also extremely common, can cause significant surgical scar tenderness/dysthesia which can lead to decreased patient satisfaction
- Our goal of this study was to present the largest-yet prospective series of trigger finger release via an endoscopic approach and to compare our outcomes to the traditional open technique

Methods

- Retrospective review of 4,023 patients who underwent endoscopic trigger finger release (ETR) over a 10 year period
- Outcomes evaluated using standardized patient-reported satisfaction scores based on postoperative pain at subsequent postoperative visits
- Results compared to 3,977 patients who underwent traditional open release at the same institutions prior to the adoption of ETR.

Results

- 4,023 patients underwent ETR with 97% success rate.
- No iatrogenic injuries reported.
- The re-occurrence rate at 10 years was zero in those that underwent endoscopic release at the same institutions prior to the adoption of ETR.

ETR Open

| Excellent Satisfaction (little/no pain post-op) | 91% | 39% |
| Good Satisfaction (moderate pain post-op) | 8% | 36% |
| Fair satisfaction (significant pain post-op) | 1% | 21% |
| Poor satisfaction (longstanding pain or limited motion) | 0% | 4% |

Figures 1 and 2: Aerial views of the ETR system.

Figures 3 and 4: Side views of the ETR system.

Conclusion

- ETR offers a minimally invasive treatment to trigger finger that yields a 97% success rate
- ETR is well-tolerated and safe
- ETR offers high patient satisfaction rates with respect to postoperative pain when compared to traditional release in select patients.
- To date, this is the largest single-study comparative outcomes analysis of endoscopic vs open trigger finger release.

References