

# 2022 NEHS Annual Meeting Abstract Submission

COMPLETE

NEHS Vice President, Daniel Mastella, M.D., is currently accepting abstract submissions for presentation at our Annual Meeting on December 2, 2022.

This meeting will be held at the Sturbridge Host Hotel in Sturbridge, MA.

Therapists, NPs, and PAs are also encouraged to submit.

THE DEADLINE FOR SUBMISSION IS OCTOBER 15, 2022

RESIDENTS AND FELLOWS ONLY. Please indicate if you want your paper to be considered for the prestigious H.Kirk Watson, M.D. Founder's Award. The abstracts for award consideration will be presented in the morning and the award will be presented in the afternoon.

---

## CREATED

## IP ADDRESS



PUBLIC

Oct 15th 2022, 9:18:37 pm



---

## \* ABSTRACT TITLE

Late Revision Surgeries for Scaphotrapeziotrapezoid Limited Wrist Arthrodesis

---

## \* Contact Person Name

Andrea Little

---

## \* Contact Person Email

---

## \* Contact Person Phone Number

---

## \* Name of who will present abstract at NEHS meeting on December 2, 2022 Please note that the same person cannot present more than one abstract at the meeting.

Andrea Little

---

## \* Please indicate if the presenter is:

Fellow

---

## \* List full names of abstract authors

Andrea Little MD MBA  
Andrew Caputo MD  
Duffield Ashmead MD

**\* ABSTRACT - should include background information and a description of methods, programs, or practices.**

---

Background

Scaphotrapeziotrapezoid (STT) arthrodesis is a well-described surgical option for various wrist pathologies. Currently there is not a clear algorithm for patients with a history of STT fusion who develop late radioscaphoid degenerative joint disease (DJD). The objective of our study was to determine how patients requiring late revision present and how they fare with conversion to scapholunate advanced collapse (SLAC) wrist reconstruction.

Methods

A single-institution retrospective chart review was performed to identify patients with history of prior STT fusion with radioscaphoid DJD who have been revised with conversion to SLAC wrist reconstruction. Presenting symptoms, radiographic results, operative findings, and postoperative results were analyzed. The primary purpose of this study was to develop a better understanding of salvage options for patients with a history of prior STT arthrodesis who go on to develop significant radioscaphoid DJD. Secondary outcomes included wrist range of motion, grip strength, Disabilities of the Arm Shoulder and Hand (DASH) scores. A multivariable analysis was performed to evaluate primary and secondary outcome factors.

Results

Three patients were identified who met inclusion criteria. All patients had a history of prior STT fusion which served them well for at least two decades however then went on to develop advanced SLAC wrist. Presenting symptoms included radial-sided wrist pain and decreased arc of wrist motion. Examination revealed significant dorsal radiocarpal tenderness and irritability with substantive periscaphoid irritability. Radiographic findings included post-surgical changes of an STT limited wrist arthrodesis with mature and remodeled fusion but also evidence of advanced radioscaphoid degenerative change and significant midcarpal degenerative change between the capitate and lunate with the radiolunate interval entirely preserved. The patients were converted to SLAC wrist reconstruction with takedown of earlier LWA, scaphoid carpectomy, synovectomy, and capitate, lunate, hamate, and triquetrum limited wrist arthrodesis with autologous bone graft. No patients developed nonunion. At final follow up, results revealed good patient satisfaction and improved QuickDASH scores postoperatively.

Conclusion

Conversion to SLAC wrist reconstruction is a safe and viable option for patients with prior STT fusion who go on to develop advanced radioscaphoid DJD.

**Please attach files with diagrams and/or photos to support your abstract (10 MB limit)**

---

lwa\_abstract\_images\_.docx

**\* Please attach the abstract presenter's CV**

---

cv\_alittle\_oct2022.docx



Figure 1: Preoperative radiographs of a 61-year old female patient demonstrating maturely healed STT limited wrist arthrodesis and reasonable overall carpal alignment with advanced radioscaphoid degenerative change with complete loss of radioscaphoid articular interval and well preserved radiolunate interval.



Figure 2: Early postoperative films reveal reasonable consolidation of the limited wrist arthrodesis at 2 months.



Figure 3: Final postoperative films demonstrating mature consolidation of the 4-corner fusion at 6 months.