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.

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IP ADDRESS

*** ABSTRACT TITLE**

An analysis of strength and function following basal joint arthroplasty

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*** 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.**

Travis Wright/Jennifer Chickering

*** Please indicate if the presenter is:**

Resident, Not currently a resident or fellow

*** List full names of abstract authors**

Travis E. Wright, Kelly C. Mead, Jennifer A. Chickering, Yifan Zhao, James O'Malley, Lance G. Warhold, Vincent D. Pellegrini

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

Thumb basal joint arthritis is the most common site of osteoarthritis in the upper extremity leading to surgical treatment. The pathomechanics of the disease are well described, yet competing theories exist on the importance of various stabilizing structures and the necessity of recreating such stabilization in basal joint arthroplasty. As such, multiple surgical approaches remain popular without clear consensus on a single best approach. In the present study, we aim to understand the relative contributions of pain relief and biomechanical stability to post operative improvement in strength and function in a cohort of surgically treated patients. We hypothesize that thumb basal joint arthroplasty with metacarpal stabilization by either ligament reconstruction and tendon interposition (LRTI) or suture suspensionplasty will provide greater improvement in strength and function than predicted by relief of pain alone. Accordingly, we investigate pre-operative lidocaine injection as a measure to predict post-operative improvement in strength. To do so, all consecutive adults with a diagnosis of basal joint osteoarthritis electing to proceed with either a therapeutic injection or arthroplasty were approached for the study beginning June 2020. Those patients enrolled underwent baseline determination of strength, visual analogue pain score (VAS), patient reported outcomes (PROMIS-10 and DASH), and radiographic assessment (Eaton arthritis stage and trapeziometacarpal joint subluxation) in addition to demographic data collection. All patients received an analgesic intra-articular injection followed by repeat strength testing. Patients in the surgical arm then underwent basal joint arthroplasty with trapeziectomy and either LRTI or suture suspensionplasty. Repeat strength testing and PRO collection was undertaken at three and six months post-operatively. Presented here are our initial findings of strength improvement after preoperative lidocaine injection compared to those observed after surgery, a highlight of our strength testing presented in conjunction with hand therapy, and suggestions for future study.

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

* Please attach the abstract presenter's CV

travis_wright_cv_summer_2022.docx