## 2022 NEHS Annual Meeting Abstract Submission



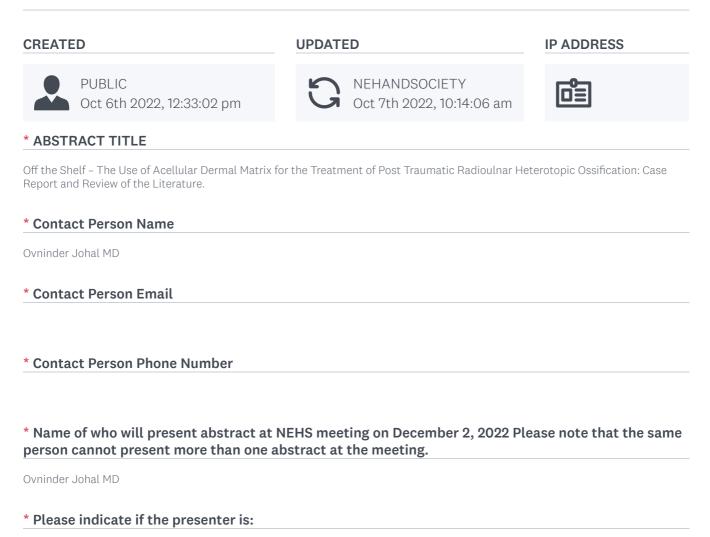
NEHS Vice President, Daniel Mastella, M.D., is currently accepting abstract submissions for presentation at our Annual Meeting on December 2, 2022.

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.



Resident

### \* List full names of abstract authors

Ovninder S. Johal, MD Brian C. Jao, MD Douglas M. Rothkopf, MD

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

Post-traumatic distal radioulnar heterotopic ossification is a rare but debilitating sequela of forearm injury, affecting approximately 2% of all forearm injuries. Proposed techniques for management have included physical therapy, radiation, medication, limited resection, ostectomy, and arthrodesis, but no one technique has emerged as the standard of care due to high rates of persistence and recurrence. Some authors have described the use of autologous interposition grafting or placement of cadaveric tensor fascia lata, but these methods are associated with donor site morbidity and difficulty with availability, respectively.

Recently, Gould et al. presented the use of human acellular dermal matrix (ADM) as an interposition material for the treatment of post-traumatic distal radioulnar heterotopic ossification in two patients with favorable results. We report on the application of this technique, involving resection and subsequent placement of a rolled segment of ADM between the radius and ulna, in a single 21-year-old male patient. The patient suffered displaced distal radius and ulnar fractures following a motorcycle collision, treated with open reduction and internal fixation, along with volar forearm fasciotomy. Initially he healed well with appropriate callus formation at the fracture sites and achievement of 50 degrees supination and 45 degrees pronation at four weeks postoperatively. Subsequently, he developed worsening stiffness and discomfort, with imaging showing severe heterotopic ossification at the distal radioulnar joint. At five months postoperatively, clinical exam decreased to 10 degrees supination, 15 degrees pronation, prompting a decision to return to the operating room for resection and ADM placement.

Postoperatively, the patient was followed both clinically and radiographically. He was found to have dramatic improvement to nearly full range of motion, with 90 degrees supination and 70 degrees pronation. There were no postoperative complications and no radiographic recurrence of disease 11 months post revision. These findings suggest a successful treatment and bolster the existing body of evidence for the use of ADM interposition as a simple and durable treatment for post traumatic distal radioulnar heterotopic ossification. The use of ADM provides a safe and effective option offering numerous benefits over other previously described techniques including a lack of donor site morbidity, low cost, and wide availability.

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

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