

March 2023

Development and Validation of a Novel Decision Aid for WALANT Hand Surgeries: Investigating Patient Preferences

Majd Faraj BS

Oakland University William Beaumont School of Medicine, mfaraj4@hfhs.org

Alex Lindahl BS

Oakland University William Beaumont School of Medicine, alindah1@hfhs.org

Shreya Balusu BS

Wayne State University School of Medicine, shreya.balusu@med.wayne.edu

Rachel Feldstein BA

Wayne State University School of Medicine, hj2208@wayne.edu

Charles S. Day MD, MBA

Henry Ford Health, Michigan State University, cday9@hfhs.org

See next page for additional authors

Follow this and additional works at: https://digitalcommons.wayne.edu/som_srs

 Part of the [Medicine and Health Sciences Commons](#)

Recommended Citation

Faraj, Majd BS; Lindahl, Alex BS; Balusu, Shreya BS; Feldstein, Rachel BA; Day, Charles S. MD, MBA; King, Elizabeth MD; and Baron, Andrew MD, "Development and Validation of a Novel Decision Aid for WALANT Hand Surgeries: Investigating Patient Preferences" (2023). *Medical Student Research Symposium*. 241. https://digitalcommons.wayne.edu/som_srs/241

This Research Abstract is brought to you for free and open access by the School of Medicine at DigitalCommons@WayneState. It has been accepted for inclusion in Medical Student Research Symposium by an authorized administrator of DigitalCommons@WayneState.

Authors

Majd Faraj BS; Alex Lindahl BS; Shreya Balusu BS; Rachel Feldstein BA; Charles S. Day MD, MBA; Elizabeth King MD; and Andrew Baron MD

Development and Validation of a Novel Decision Aid for WALANT Hand Surgeries: Investigating Patient Preferences

Majd Faraj, BS¹, Alex Lindahl, BS¹, Shreya Balusu, BS², Rachel Feldstein, BA², Charles S. Day, MD, MBA³, Elizabeth King, MD³, Andrew Baron, MD³

¹Oakland University William Beaumont School of Medicine, Auburn Hills, MI, ²Wayne State University, Detroit, MI,

³Henry Ford Health System, MI

Contact: Charles S. Day, MD, MBA cday9@hfhs

Disclosures: Alex Lindahl (N), Majd Faraj (N), Shreya Balusu (N), Rachel Feldstein (N), Charles S. Day (N)

INTRODUCTION: This study aims to develop a novel decision aid packet (DAP) for hand surgery patients deciding between Wide-Awake-Local-Anesthesia-No-Tourniquet (WALANT) and traditional anesthesia.

METHODS:

Development:

The DAP was developed following International Patient Decision Aid Standards.

Validation:

Alpha Testing

Seven hand surgeons experienced in WALANT and traditional surgeries belonging to the WALANT Research Consortium in the U.S. commented on the DAP through three rounds of editing utilizing the Delphi method. Seven patient advocates provided readability feedback.

Beta Testing

Orthopedic hand surgery patients were assigned to the control or experimental group. The experimental group was given the DAP pre-surgery. Both groups completed a validated regret scale at follow-up. A paired t-test was conducted to analyze the difference between average scores on the regret scale and pre- and post-DAP knowledge tests ($p < 0.05$).

RESULTS: The experimental group ($n=58$) demonstrated a 145% increase ($p < 0.001$) in average knowledge test scores. 74% of these patients preferred WALANT; 20.6% preferred traditional anesthesia. 81% demonstrated low decisional conflict. The experimental group scored significantly lower than the control group ($n=60$) on all regret scale questions ($p < 0.05$).

DISCUSSION: Increased knowledge test scores following the DAP suggest that patients are better informed after DAP usage. Low decisional conflict scores suggest that the DAP increases patients' confidence. Lower average regret scale scores among the experimental group indicate a relationship between DAP administration and reduced post-surgical regret. The greater patient preference for WALANT following DAP usage, alongside the lower postoperative regret, elucidates a general preference in informed patients towards the WALANT modality.