QuickDASH Scores Do Not Differ between Dominant vs. Non-Dominant Sided Upper Extremity Injuries: A Retrospective Cohort Analysis

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INTRODUCTION: The QuickDASH (qDASH) outcome measure is an 11-item questionnaire administered to track levels of functional improvement amongst patients suffering from an upper extremity injury. It asks patients to rate the difficulty of various activities (e.g., opening a jar, turning a key). To date, no consensus exists regarding whether different rates of qDASH score improvement exist between dominant-sided vs. non-dominant-sided injuries, and whether qDASH score improvement differs based on the site of injury (e.g., shoulder vs. wrist).

METHODS: A retrospective sample of 3,424 patients requiring upper extremity surgery between March 2020 and March 2025 were evaluated to identify improvements in qDASH scores from preoperative visits up through 6 months post-operation. Patients were characterized by a proximal injury group (shoulder and elbow) and a distal injury group (hand and wrist).

RESULTS SECTION: Patients were assessed for qDASH scores at preoperation, 3 months post-operation, and 6 months post-operation. At each time point, no statistically significant difference in score was observed between dominant-sided and non-dominant-sided patients, both in the shoulder/elbow subgroup and in the hand/wrist subgroup. When examining the amount of improvement in qDASH scores from preoperation to 6 months post-operation, no statistically or clinically significant difference was seen in dominant-sided vs. non-dominant-sided patients across the shoulder/elbow subgroup ($p = 0.409$) and the hand/wrist subgroup ($p = 0.262$).

DISCUSSION: QuickDASH score improvement at 6 months post-operation is not significantly different between dominant-sided and non-dominant-sided upper extremity injuries. Moreover, neither proximal nor distal injury groups suggested worse recovery in dominant-sided patients.

SIGNIFICANCE/CLINICAL RELEVANCE: (1-2 sentences): The purpose of this study is to determine whether involvement of the dominant vs. non-dominant upper limb affects qDASH scores, and whether the degree of improvement differs by region along the upper extremity.