Evaluation of Migraine Surgery Outcomes through Social Networking Sites

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INTRODUCTION: Social Networking Sites (SNS) have been used to study many aspects of health and human behavior. Although SNS present a unique opportunity to obtain unsolicited patient reported outcomes, their use has been limited in plastic surgery. Migraine nerve surgery has been proven to be successful, yet remains controversial in neurology literature. This work aims to use Facebook, the most popular SNS, to evaluate outcomes of migraine surgery.

METHODS: This study evaluated six months of posts and comments from two closed Facebook groups regarding migraine surgery, nerve stimulators, and radiofrequency nerve ablation. Outcomes were classified by degree of resolution of symptoms.

RESULTS: A total of 639 posts related to surgical management. Of 304 posts commenting on post-op success of nerve surgery, 16.1% reported cure, 64.8% significant improvement, 5.3% partial improvement, 11.2% no change, and 2.6% worse. Overall, 80.9% of nerve surgery posts were considered successful surgeries. Seventeen posts referenced nerve stimulator, with 47.1% improvement, 11.8% partial improvement, 23.5% no change, and 17.6% worse. Sixty-five referenced nerve ablation with 4.6% cure, 44.6% improvement, 1.5% partial improvement, 26.2% no change, and 23.1% worse. Nerve surgery was recommended by 89.5% of users.

CONCLUSIONS: The 80.9% rate of complete or significant resolution of symptoms in this study is very close to the 78.7%-83.7% shown in large case series and a randomized control trial.[1-3] The fact that unsolicited patient input obtained in this study is similar to the previously published literature adds validity to the data reported in those articles. Similar to the findings of a recent systematic review, surgery is more efficacious compared to nerve stimulators and ablation.[4] This study adds to evidence favoring headache surgery by removing evaluator bias, and shows that surgical outcomes and satisfaction data may be obtained from SNS.

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