Background:

Migraines affect 28 million people in the United States. Surgical treatment for migraine headaches refractory to medical treatment has grown recently for patient with limited options. Utility scores are standardized tools offering validated means of measuring the health state preference of a health condition or disease state. The aim of this study was to prospectively determine the impact of the health state burden prior to surgical treatment, to characterize the quality of life for this patient population.

Methods:

Twenty consecutive patients [1 male (5%), 19 females (95%)], age of 47.2 years (SD=14.9) undergoing surgery for migraines were prospectively assessed to establish utility scores [visual analogue scale (VAS), time-trade off (TTO), and standard gamble (SG)] and migraine specific symptoms and disability (MSSD), prior to surgical treatment. Utility scores for monocular and binocular blindness were used as a control for validation and comparison

Results:

Despite medical treatment, MSSD demonstrated mean 15.2 headaches per month (SD=8.7), lasting 14.2 hours (SD=9.7) per episode, with a mean pain level of 8.1 (SD=1.8) for patients prior to surgical treatment. Utility scores (VAS, TTO, SG) for migraine headaches were 0.54 (SD=0.26), 0.76 (SD=0.26), and 0.73 (SD=0.27) respectively; similar to those for monocular blindness (0.52, 0.80, 0.80) but higher than binocular blindness (0.24, 0.55, 0.57)

Conclusion:

Migraine headaches refractory to medical treatment can be objectively assessed using utility scores. Utility scores for migraine headaches were comparable to previously published data for unilateral facial paralysis and lower extremity lymphedema, and worse in comparison to common cosmetic deformities such as breast ptosis and an aging neck. We have described the health state burden, in a prospective manner, in order to expand the benefits of surgical treatment of refractory migraine headaches, and express the debility for this patient population.