



Unilateral Thumb Amputation: An Assessment of Utility Outcomes



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Comparison of Health States

	VAS	TTO	SG
Breast Hypoplasia	0.89	0.93	0.93
Erectile Dysfunction	0.71	0.89	0.94
Aging Neck post MWL	0.89	0.94	0.95
Body Contouring following MWL	0.79	0.89	0.89
Severe Breast Hypertrophy	0.70	0.85	0.88
Cleft Lip and Palate	0.69	0.85	0.84
Monocular Blindness	0.67	0.86	0.84
Binocular Blindness	0.38	0.70	0.66
Severe facial disfigurement	0.46	0.68	0.66

Background

Unilateral thumb amputation causes significant morbidity in affected individuals, significantly compromising their capacity to perform tasks with the affected hand. Utility outcomes are powerful tools that have been used to objectively quantify the impact of several medical conditions on quality of life. In the present study, we measured the impact of unilateral thumb amputation on quality of life.

Utility Measures

Quantitative and objective measure of a health state preference (or value) Score from 0 (death) to 1 (perfect health). This Allows us to make quantitative comparisons between many health states which could have a potential impact on resource allocation for treatment and research. There are validated tools to determine a utility score including ; Standard Gamble ,Time Trade-Off, and Visual Analogue Scale (VAS)

Materials and Methods

Using scores were measured using the time trade-off (TTO), visual analogue scale (VAS), and standard gamble (SG) tests in unilateral thumb amputation, monocular blindness, and binocular blindness in prospective participants recruited using Craigslist and McGill Classifieds. Utility scores were compared using paired t-test. Linear regression analysis was performed using gender, race, income, and education as independent predictors of utility.

Mean Utility Scores

Utility Score	Monocular Blindness	Binocular Blindness	Unilateral Thumb Amputation	p
VAS	0.63±0.16	0.35±0.17	0.74±0.14	<0.001
TTO	0.87±0.14	0.61±0.28	0.90±0.13	<0.001
SG	0.86±0.14	0.62±0.26	0.85±0.22	<0.001

- The scores for severe unilateral thumb amputation were significantly different and lower than for monocular blindness
- TTO : willingness to sacrifice 3.5 years of life
- SG : willingness to undergo a procedure with 15% chance of mortality

Conclusion

Burden of living with severe unilateral thumb amputation is comparable to monocular blindness and other pathological states in plastics (cleft lip and palate, facial disfigurement) that are recognized as a cause of significant functional impairment.

Our sample population, if faced with unilateral thumb amputation, is willing to sacrifice 3.5 years of life and to undertake a procedure with a 15% chance of mortality to attain perfect health

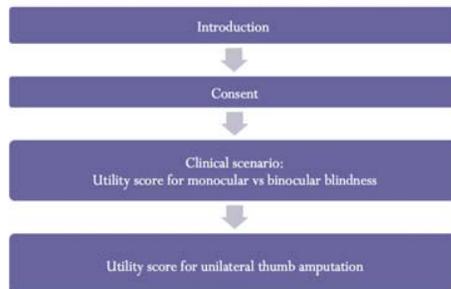
This study can help us establish decisions on allocation of financial resources for health care. Further psychological and ethical studies are recommended.

Aim of Study

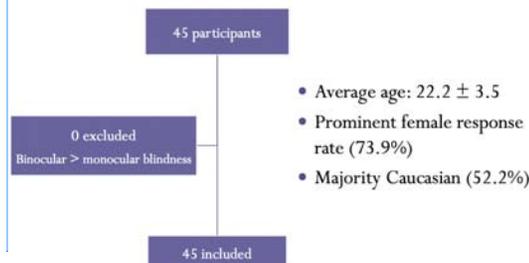
The aim of study is to:

To identify and compare the health state utility assessment of living with unilateral thumb amputation compared to other known diagnosis or disease states in plastic surgery

Methods: Questionnaire Summary



Results: demographics



References:

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