14th World Congress on Plastic, Aesthetic and Reconstructive Surgery

16th International Conference on Otorhinolaryngology: ENT Surgery

JUNE 16, 2022 | WEBINAR

Patient reported assessment of pediatric facial port wine: A health utility outcomes study

Jenny Yau
Mass Eye and Ear, USA

Background: Port-wine stains (PWSs) are congenital vascular malformations that affect three to five children per 1000 live births, with no sex predilection. Affected areas gradually darken and hypertrophy over time, resulting in significant functional sequalae and psychosocial distress throughout a child's developmental years. This study aims to investigate the patient-perceived burden of pediatric facial PWS prior to treatment using standardized utility metrics.

Methods: Adult patients being treated for facial PWS completed an online questionnaire consisting of visual analogue scale (VAS), standard gamble (SG), and time trade-off (TTO) utility techniques. Health states were presented using still facial photographs and descriptions of monocular blindness, binocular blindness, and untreated pediatric facial PWS. Utility scores were analyzed using one-way ANOVA with post hoc Tukey HSD test for pairwise comparisons.

Results: Among the 33 patients included in our analysis (mean [SD] age, 40.7 [16.2] years; 20 women [60.6%]; 12 men [36.4%]; 1 unknown [3.0%]), patient-rated VAS, SG, and TTO scores (mean ± SD) for untreated pediatric facial port-wine stain (0.74 ± 0.25, 0.88 ± 0.19, 0.85 ± 0.22) ranked significantly higher than those of binocular blindness (0.45 ± 0.24, 0.64 ± 0.25, 0.67 ± 0.27; $p<0.001$), while approaching scores of monocular blindness (0.71 ± 0.20, 0.83 ± 0.18, 0.87 ± 0.19).

Conclusion: This is the first study to apply the health state utility model in demonstrating the patient perspective of pediatric facial PWS. Patients perceived the utility of untreated pediatric PWS to be comparable with monocular blindness and were willing to sacrifice 15%, or 10.08 years, of their child's remaining years of life to permanently treat their facial PWS. The objectively assessed health state burden of pediatric facial PWS indicates that patients associate this condition with a certain degree of aesthetic, functional, and psychosocial impairment and would desire early treatment intervention for their child.

Received Date: April 01, 2022; **Accepted Date:** April 04, 2022; **Published Date:** June 30, 2022