

Predictive Factors of Quality of Life after Total Laryngectomy, a Multivariate Analysis.

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Introduction

- Total laryngectomy (TL) remains the treatment of choice for locally advanced laryngeal cancer as well as for the local recurrences following organ preservation treatments.
- Given the larynx's fundamental functions in speech, breathing and swallowing, TL can have a considerable impact on the patient's quality of life (QOL).
- Evaluating quality of life in head and neck cancer patients has been proven to be a predictor of survival.
- Several factors, both intrinsic and extrinsic to the patient, can affect the quality of life of those patients.

Results

- Sixty-two patients included (47 men and 15 women) with a mean age of 68 years.
- Domain of speech was the most affected (56.5% of patients).
- Number of years since surgery linked to greater physical (β :3.33, $p < 0.01$), social (β :3, $p < 0.001$), and global score (β :3.33, $p = 0.006$).
- Larger household sizes associated with higher physical scores (β :3.5, $p = 0.018$).
- Female gender associated with significant decline in social score of 13.6 points ($p < 0.001$).

Variable	Beta coefficient	p-value
Years since surgery	3.33	<0.01
Household size	3.5	0.018
Social Status	Married	0
	Other	-2.845
Alcohol consumption	No	0
	Yes	-3.782
Follow-up following surgery	No	0
	Yes	2.61

Table 1- Multivariate analysis: Factors affecting Physical composite score

Variable	Beta coefficient	p-value
Years since surgery	3	<0.001
Sex	Male	0
	Female	-13.6
Social Status	Married	0
	Other	1.2
Follow-up following surgery	No	0
	Yes	3.2
Region of residence	Center	0
	North	4
	South	4.9
	Bekaa	7.9

Table 2- Multivariate analysis: Factors affecting Social composite score

Objectives

- Evaluate the impact of TL on various physical and social aspects of patients' lives.
- Identify predictors of poor quality of life in these individuals.

Conclusion

- TL greatly affects the overall quality of life of patients with the domain of speech being most affected.
- Household size and time span since surgery were associated with higher QOL scores.
- Women were more susceptible to experience challenges in social functioning as compared to men.
- These factors should be taken into consideration when addressing patients to improve their quality of life.

Materials and Methods

- Observational cross-sectional study conducted throughout 2020.
- Population: Lebanese patients who underwent TL at Hôtel-Dieu de France Hospital between 2014 and 2020.
- Patients filled the arabic version of the University of Washington Quality of Life Questionnaire.
- Univariate analysis performed for distribution of physical, social and global question scores across variables.
- Variables with a p-value < 0.2 selected for subsequent multivariate analysis.

References

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