

Listen to Patients: Quality of Life and Symptoms After Thyroidectomy

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Introduction

- Surgical decision-making for thyroid disease largely incorporates patients' perspectives.
- Our knowledge of patient's perioperative symptoms and quality of life (QOL) is still limited
- We aimed to investigate the impact of thyroidectomy on QoL for patients with thyroid disease



Materials and Methods

- A prospective longitudinal cohort study was conducted at a tertiary medical center (2021-2023)
- Patients who underwent thyroid surgery for all indications were included.
- Thyroid-Related Patient-Reported Outcome (ThyPRO-39) was administered preoperatively and monthly up to 12 months postoperatively. Disease-related symptoms and composite scores were calculated.
- Demographics and clinical outcomes were compared between patients with and without preoperative hyperparathyroidism.
- One-way within-subject ANOVA with Bonferroni correction and multivariable linear regression were performed.

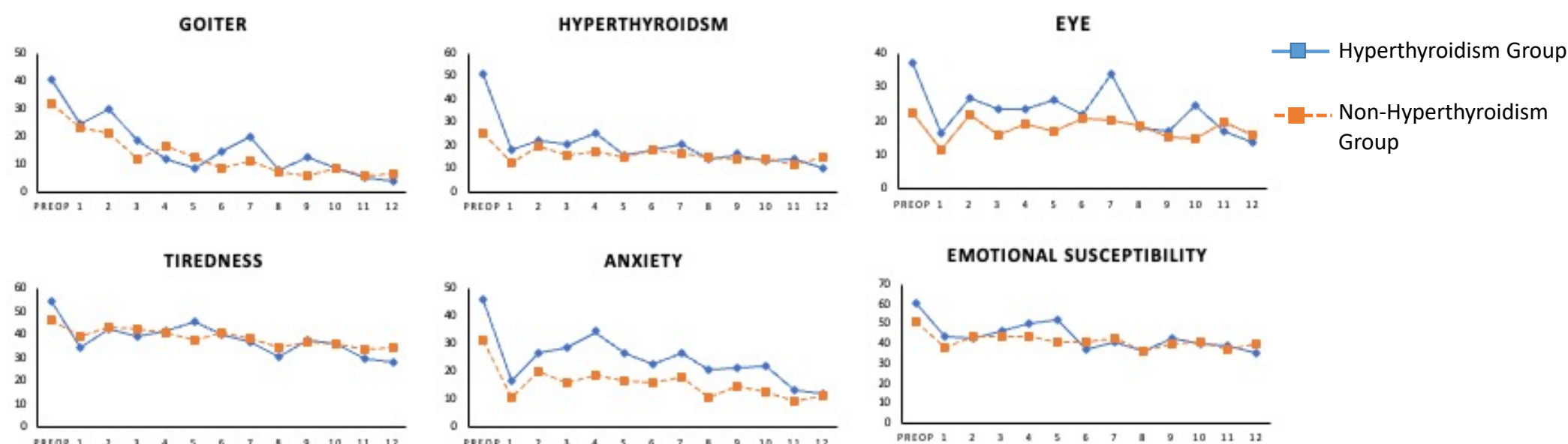
Results

- Symptoms of goiter, hyperthyroidism, vision deficits, tiredness, cognition, anxiety, and emotional susceptibility improved after thyroidectomy in both hyperthyroidism and non-hyperthyroidism groups (Figure 1)
- Multivariable linear regression showed that female ($\beta=10.2$) and preoperative hyperthyroidism ($\beta=11.3$) were associated with larger postoperative QoL improvements, while Black ($\beta=-7.2$) was associated with smaller improvements.

Table 1 Patient demographics

	Hyperthyroidism (n=35)	Non- Hyperthyroidism (n=70)	Total (n=105)	P value
Age (years, mean±SD)	44 ± 13	52 ± 16	49 ± 16	0.013
Sex - Female	28 (84.5%)	57 (79.2%)	85 (81.0%)	0.380
Race - White	16 (48.5%)	50 (69.4%)	66 (62.9%)	0.156
BMI (kg/m², mean±SD)	35.4 ± 10.0	32.5 ± 8.7	33.5 ± 9.2	0.119
Charlson Comorbidity Index (median (IQR))	1.0 (0 - 2.0)	2.0 (0 - 3.0)	1.0 (0 - 2.5)	0.112
Procedure				
Total thyroidectomy	32 (91.4%)	35 (50.0%)	67 (63.8%)	<0.001
Thyroid size	6.1 (5.0 - 7.5)	5.0 (4.1 - 6.1)	5.2 (4.5-6.5)	0.004
Postop complications				
Clinical hypocalcemia	4 (11.4%)	2 (2.9%)	6 (5.7%)	0.074
Voice hoarseness	3 (86%)	7 (10.0%)	10 (9.5%)	0.814
Hematoma	0	0	0	-

Figure 1 Trend of disease-related symptoms and QOL composite scores after thyroidectomy



Conclusion

- Thyroidectomy improves patients' Quality of Life with thyroid disease, especially hyperthyroidism.
- Quality of Life improvement should be incorporated as an important consideration when making surgical decisions.