A systematic review and meta-analysis on the psycho-social predictors of the quality of life of patients with laryngectomy

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Scientific context:
• Quality of life is considered an important indicator for the efficacy of rehabilitation methods for patients that have undergone laryngectomy.
• Little is known about prior psychological characteristics of patients that might impact quality of life after the surgical procedure.
• Psychological interventions before or after laryngectomy might target such factors to improve outcomes in terms of adaptation to the new condition, reduce distress, and increase the quality of life of the patients.

Objective:
• Identify the psychological factors that predict adjustment to post-laryngectomy condition.
• Estimate the effect size for the contribution of these factors.

Methods:
Inclusion criteria:
1. the study measured quality of life following total laryngectomy;
2. the study measured at least one psychosocial variable as a predictor of post-surgery quality of life;
3. sufficient data was reported to allow the computation of the effect size;
4. the study was written in English.

• A comprehensive review and meta-analysis of the literature has been performed using the random effect model and using Hedges’ “g” as an indicator of effect size.

Results:
• We obtained a small overall effect size of Hedges \( g = .36; 95\% \text{ CI } [.05; .68], Q(11) = 35.27, p < .001, I^2 = 68.81 \). Prior presence of mental disorders emerged to be the best predictor for quality of life after laryngectomy \( Q(5) = 29.58, p < .001 \).

Discussion and conclusion:
• We need more research on the psychological factors that can facilitate the adaption of patients with laryngectomy.

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