

## Health-related quality of life, dysphagia, voice problems, depression, and anxiety after total laryngectomy

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### Background:

The aims were to determine health-related quality of life (HRQoL), including voice problems, dysphagia, depression, and anxiety after total laryngectomy (TL), and investigate the associations between HRQoL and the late effects.

### Methods:

Cross-sectional study including 172 participants having received TL 1.6-18.1 years ago for laryngeal/hypopharyngeal cancer who filled in the EORTC QLQ-C30, EORTC QLQ-H&N35, V-RQOL, MDADI, and HADS questionnaires.

### Results:

Participants scored worse than normative reference populations on all scales/items of the EORTC questionnaires, except one, and almost half of the scales/items showed a clinically relevant difference. Moderate/severe dysphagia was present in 46%, moderate/severe voice problems in 57%, depression in 16%, and anxiety in 20%. Decreasing age, increasing numbers of comorbidities, increasing voice problems, increasing dysphagia, and increasing depression symptoms, were associated with a lowered EORTC QLQ-C30 summary score.

### Conclusion:

A substantial proportion of participants experienced clinically significant late effects and increasing levels of these were associated with a lowered HRQoL.