

**Mental adjustment and Health-related Quality of Life  
In laryngeal cancer patients  
Quantitative and Qualitative approaches**

**Akademisk avhandling**

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av

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Avhandlingen baseras på följande delarbeten:

- I. Is a line the same as a box? Speech assessment by VAS is not superior to Likert scales in laryngeal cancer patients. Johansson M, Finizia C, Degl'Innocenti AD, Rydén A. Med Sci Monit 2007;13(11):CR481-487
- II. Self Evaluation of Communication Experiences after Laryngeal Cancer – a longitudinal questionnaire study in patients with laryngeal cancer. Johansson M, Rydén A, Finizia C. BMC Cancer, 2008;8:80
- III. Mental adjustment to cancer and its relation to anxiety, depression, HRQL and survival in patients with laryngeal cancer. Johansson M, Rydén A, Finizia C. Submitted.
- IV. “Setting Boundaries” – Mental Adjustment to Cancer In Laryngeal Cancer Patients: An interview study. Johansson M, Rydén A, Ahlberg K, Finizia C. Submitted.

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## Abstract

The overall aim of this thesis was to investigate mental adjustment and HRQL in patients treated for laryngeal cancer. Specific aims were to evaluate if either VAS or Likert response options was more suitable when assessing self-ratings of voice and speech; to investigate the sensitivity to change of the Swedish Self Evaluation of Communication Experiences after Laryngeal Cancer questionnaire (the S-SECEL); to investigate the relation between mental adjustment to cancer and HRQL, mood disorder and survival and to evaluate the content validity of the Swedish version of the Mini-MAC Scale.

Both inductive and deductive research methods were used. Quantitative methods were used in paper I – III, which are based on a prospective longitudinal study including 100 laryngeal cancer patients. Patients were assessed pre-treatment and 1, 2, 3, 6 and 12 months after start of treatment. Self-report instruments distributed were the S-SECEL, Mini-MAC, EORTC-QLQ-C30 with the QLQ-H&N35, HAD and one study specific instrument. Data were analysed primarily with non-parametric methods. Qualitative methods were used in paper IV where 18 patients with laryngeal cancer were interviewed shortly after end of treatment. Data were analysed using a constant comparison technique consistent with Grounded Theory.

Results demonstrated that communication dysfunction increased 1 month after start of treatment, followed by a continuous decrease throughout the year. The S-SECEL was well accepted by patients and demonstrated more sensitivity to change in communication dysfunction over time compared to more established instruments. Patients using the mental adjustment responses Helpless-Hopeless and Anxious Preoccupation reported more anxiety and depression, as well as decreased HRQL. Survival analysis indicated that use of a Helpless-Hopeless response was related to poorer survival; however, these results are based on a relatively small study sample. The results from paper IV showed the core category to be Setting Boundaries, concerning patients' attitude to information and thoughts about the cancer and a prerequisite for mental adjustment to diagnosis and treatment without major negative impact on mental health or HRQL. The results from paper IV largely confirmed the structure of the Mini-MAC Scale.

Conclusion: For assessment of self-rated voice and speech in laryngeal cancer patients, the Likert scale seems to be more suitable than the VAS, possibly due to the relatively high age of the patient population. The S-SECEL could be a valuable tool in clinical practice for identifying patients at risk for psychosocial problems and to help plan rehabilitation. Considering the relation between mental adjustment and HRQL, mood disorder and possibly survival, assessment of mental adjustment should be considered when planning treatment and rehabilitation in laryngeal cancer patients. The findings further emphasize the importance of adapting the information given and rehabilitation options to each individual patient.

Key words: laryngeal cancer, HRQL, mental adjustment to cancer, S-SECEL, Mini-MAC  
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