Health-related quality of life among thyroid cancer survivors

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Background (1)

- Incidence rates are rising worldwide
- Aggressive surgical and postoperative treatment procedures
- Lifelong dependence on exogenous thyroid hormone
- Five-year relative survival >90%
Background (2)

Our literature review showed\(^1\):

- Severe impairments of HRQoL after treatment and follow-up procedures
- Long-term thyroid cancer survivors understudied population
- Results contradictory: absence of thyroid cancer specific HRQoL questionnaire, small sample sizes, lack of normative population.

1. Husson et al. (2011), *Clinical Endocrinology*

Aims of the present study

- Comparing a sample of thyroid cancer survivors with an age- and sex-matched normative population on HRQoL
- Socio-demographic and clinical characteristics associated with (thyroid cancer specific) HRQoL
Methods (1): Setting and participants

• Population-based cross-sectional survey

• Thyroid cancer patients (diagnosed between 1990-2008) were selected from the Eindhoven Cancer Registry (ECR).

• Data collection conducted in 2010

Methods (2): Data collection

• Medical specialists from 11 hospitals were involved
  – Sent invitation letter and a questionnaire to the selected patients

• Questionnaires:
  – EORTC QLQ-C30 (HRQoL)²
  – THYCA-QoL (Thyroid cancer specific HRQoL)³
  – Single questions about socio-demographics

• Questionnaires were linked with disease history as registered by ECR;
  – Stage, date of diagnosis, date of birth etc.

Results (1): Response

- 355 patients received a questionnaire
- 306 patients participated (86%)
- No differences between respondents and non-respondents on socio-demographic and clinical variables

Results (2): Participant characteristics

- Mean age time survey: 56 (15) years
- Mean years since diagnosis: 9.6 (5.5) years
- 75% female
- 71% papillary; 20% follicular thyroid cancer
- 57% stage I, 20% stage II, 16% stage III
- 77% at least one comorbid condition
Results (3): EORTC QLQ-C30 functioning

- Global health
- Physical functioning
- Role functioning
- Emotional functioning
- Cognitive functioning
- Social functioning

Results (4): EORTC QLQ-C30 symptoms

- Fatigue
- Nausea
- Pain
- Dyspnea
- Insomnia
- Appetite
- Constipation
- Diarrhea
- Financial difficulties

Thyroid cancer survivors vs. Norm population
Results (5) Thyroid cancer specific HRQoL

Most common reported complaints were:

- Sympathetic problems (feeling chilly, hot flushes, and difficulty tolerating heat)
- Neuromuscular problems (cramp legs and pain joints/muscles)
- Abrupt attacks of fatigue

Results (6): Associations clinical and socio-demographic variables with HRQoL

- Higher stage disease: more voice problems
- Fewer years since diagnosis: more voice, throat and scar problems
- Females: more sympathetic problems
- Comorbid condition, low educational level and absence of partner: worse functioning and more symptoms (QLQ-C30)
Results (7): Associations thyroid cancer specific problems with HRQoL

- Neuromuscular problems: worse functioning on all scales, except cognitive
- Concentration problems: worse cognitive and social functioning
- Sympathetic problems and headache: worse global quality of life
- Psychological problems: worse physical, emotional and social functioning and global quality of life

Discussion

- Most clinical variables were not directly associated with HRQoL
- Comorbid conditions were associated with lower (thyroid cancer specific) HRQoL
- Thyroid cancer specific symptoms were most strongly associated with HRQoL
  
  this possibly indicates thyroid dysregulation
Conclusions

Thyroid cancer specific problems last up to 20 years after diagnosis and are strongly associated with HRQoL.

Awareness of these specific determinants of HRQoL could help health care practitioners to provide better supportive care.

Thank you for your attention!

Health-related quality of life and disease specific symptoms in (long-term) thyroid cancer survivors: a study from the population-based PROFILES registry. Olga Husson, Harm Haak, Laurien Buffart, Willy-Anne Nieuwlaat, Wilma Oranje, Floortje Mols, Johannes Kuijpers, Jan-Willem Coebergh, Lonneke van de Poll-Franse. Submitted for publication

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