Head and Neck Cancer Survivorship: What the Research Tells Us

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Managing the Effects of Treatment
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H&N Cancer: My Introduction


Established in June 1996, and began managing extramural grants in FY97 by supplementing 20 cooperative agreements to examine long-term side effects.

Defines “survivor” as anyone diagnosed with cancer, from the time of diagnosis to the end of life (NCCS), including caregivers and family members.

http://dccps.cancer.gov/ocs/
OCS Mission

- Enhance the length and quality of survival of all cancer survivors

- Support research that helps us understand, prevent, or reduce adverse physical, psychosocial, and economic outcomes associated with cancer and its treatment

- Educate professionals about issues related to cancer survivorship
NIH FY06 Cancer Survivorship Research Grants by Institute (N = 251)

- NCI, 220
- NINR, 16
- NINDS, 1
- NICHD, 1
- NIDDK, 1
- NHLBI, 2
- NIMH, 3
- NIA, 3
- NCCAM, 4
NIH FY06 Survivorship Research Grants by Cancer Site
(*Grants may have > 1 focus)
Major H&N Cancer Survivorship Concerns

- Physical Well-being
  - Cancer control
  - Nutrition
  - Activities of daily life
  - Pain
  - Sensory changes
- Emotional Well-being
  - Mood/coping
- Communication
  - Speech and
- Social Functioning
- Economic/Health Insurance
- Employment
Quality of Life v. Quantity of Life
NIH Funded Research in H&N Cancer Survivorship

Jeri Logemann, Ph.D., and colleagues
Northwestern University, Department of Communication Sciences and Disorders
  Funded by NCI and National Institute on Dental Research

Purpose
  • Compare swallow function of pts treated by RT alone (n = 12) or chemoRT (n = 36) for oropharyngeal cancer

Findings:
  • All had swallowing problems pre-treatment
  • Swallow function worse among those treated with chemoRT
  • Swallowing function may worsen over several years post-RT

  ↓ Tongue base retraction and tongue strength
  ↓ Delayed pharyngeal swallowing
  ↓ Delayed Vestibule closing
  ↓ Reduced anterior-posterior tongue movement
  ↓ Reduced saliva production
NIH Funded Research in H&N Cancer Survivorship

- 56% received swallowing therapy, average of 4 (range 1 – 21)
- Reasons for not getting needed swallowing therapy
  - Economic
  - Not covered by many insurance plans
  - Access to rehabilitative services
  - Felt too ill, particularly after chemoRT

NIH Funded Research in H&N Cancer Survivorship

Henrietta Logan, Ph.D., University of Florida

- Survey of what adults knew about oral cancer and its risk factors
  - 46% never heard of it or stated they knew relatively nothing about it

Survey of 100 H&N cancer survivors > 5 yrs post Rx
Administered large battery of tests, including assessments of physical function, tobacco and alcohol use, anxiety, depression, fatigue, self-consciousness
~20% depressed, using tobacco and alcohol
NIH Funded Research in H&N Cancer Survivorship

Gerry Funk, M.D., University of Iowa

Purpose: Examine social support and quality of life in 394 H&N cancer survivors about 1 yr from diagnosis

Findings:
- Social support positively associated
- Speech function
- Lower depression
- Aesthetics

NIH Funded Research in H&N Cancer Survivorship

Gerry Funk, M.D., University of Iowa

Purpose: Evaluate the prognostic value of patient self-reports of general physical health in 403 H&N ca survivors

Findings:
- Pts who did not recover from low physical component summary at 3 months more likely to die within 3 years
- Physical component summary was predictive of overall and cancer-specific survival
- Change in self-reported health status in first year since diagnosis is strong prognostic indicator

Veterans Affairs and NCI Funded Research in H&N Cancer Survivorship

Sonia Duffy, PhD, RN et al., VA Ann Arbor Health Care System

Purpose: Examine how quality of life affects survival among 495 H&N cancer survivors

Results: Controlling for time since diagnosis, sociodemographic characteristics, tumor site & stage, and tobacco use (all independent significant survival predictors):

- Overall physical function and pain, speech, and eating measures predicted survival
- Mental and emotional function NOT associated with survival
- Sex, race, and alcohol use NOT associated with survival

NIH Funded Research in H&N Cancer Survivorship

Pamela F. Short, PhD, Pennsylvania State University, NCI funded

• Purpose: Examine effect of cancer on employment and disability, including 58 H&N ca survivors

• Findings: Among H&N ca survivors, females had higher disability than males
  – ? Effected social function
  – ? Body image

NIH Funded Research in H&N Cancer Survivorship

Heidi Silver and colleagues, Vanderbilt University, ACS/NIH-NCRR funded

- Purpose: Examine body mass and body composition, physical symptoms among 17 patients with advance stage H&N cancer treated with chemoRT

- Findings:
  - Lean body mass accounted for most of body mass loss, and predicted decline in physical function
  - LBM independent of dietary intake
  - All pts started losing weight 1 week after Rx

NIH Funded Research in H&N Cancer Survivorship

Paul Evitts, Ph.D., Towson University

Eye-Gaze Tracking of Normal Listeners to Alaryngeal Speech

Purpose: Investigate the role of visual information on normal listeners when communicating with an individual with alaryngeal speech

Results: In progress
Recommended Reviews


What Does the Research Tell Us?

- Issues of H&N cancer survivorship not understood by general population
- Physical functioning appears to be key to survival
- Lean body mass is the critical element in weight loss or changes in body composition
- Social support important (necessary) for positive outcomes
- Need continued, sustained research that keeps pace with changing treatment modalities

- Lack of resources to support rehabilitation
- Most survivors are getting some counseling with respect to tobacco/alcohol use, but around 20% don’t adhere to recommendations to quit.
Research Gaps in H&N Cancer Survivorship

Functional status and symptom management
• Rehabilitative needs and interventions

Needs of special populations
• Very elderly, particularly those without spouses
• Rural populations
• Immigrant populations
• Minority populations
• Caregivers
• Families