Speech Pathology

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A pilot study investigating the relationship between the level of compliance with a swallowing exercise program and swallowing outcomes for patients with head and neck cancer undergoing (chemo)radiotherapy:

The Speech Pathology Department received a grant of $29,249 from the Southern Melbourne Integrated Cancer Service (SMICS) to fund this study. The principal researcher is Amanda Dwyer who works with head and neck cancer patients at the William Buckland Centre.

The study aims to improve care for head and neck patients with swallowing problems. These problems are frequently experienced following radiotherapy to the head and neck area and result in a reduction in the quality of life. Previous research has reported that exercises to stretch and strengthen muscles during and following (chemo)radiotherapy can improve swallowing function. This study examines the efficacy of an exercise program on swallowing ability and quality of life.

A range of patient information including treatment modality, the site and stage of cancer, gender, psychosocial history, geographical location and social support will be collected. The patients will be given a swallowing exercise program two weeks prior to commencing their (chemo)radiotherapy and instructed to complete the exercise program daily until three months post completion of their treatment. Swallowing function will be assessed using videofluoroscopy prior to commencing the exercise program and at three and six months post (chemo)radiotherapy. Measures of patients' oral intake, weight, tongue strength, range of jaw movement, extent of oral health side effects and quality of life will also be taken. To establish if there is a relationship between compliance with the exercise program and swallowing outcomes, the patients will be also requested to record the number of times exercises are completed.

This study follows on from an audit of radiotherapy patients focusing on the timing and severity of swallowing problems that was also funded by SMICS. Leonie Baker presented the results of the audit to the Speech Pathology Australia Conference 2010.

Changes in the diameter of the recurrent laryngeal nerve during thyroid surgery and the relationship of this to voice changes following surgery: a collaborative project between Speech Pathology, ENT and Endocrine Surgery:

The Speech Pathology Department participates in this collaborative study with Professor Jonathan Serpell from the Department of General Surgery. Speech pathologists Miriam Voortman and Jessica Hayward are involved in collecting data using the lingWAVES voice analysis system. This evaluates the vocal function of patients before thyroid surgery, one day post surgery and at three months post surgery.

Other Achievements

Gulsen Ellul presented the results of a project that benchmarked the management of orofacial contractures in burns units across Australia and New Zealand at the Speech Pathology Australia 2010 conference and at the Australian and New Zealand Burns Association 2010 conference. She received the award for best allied health presentation at the Australian and New Zealand Burns Association conference, and plans to use the results to develop a study examining the efficacy of specific interventions.

Tanya Blyth presented the results of a study, 'The effective assessment of high level cognition based communication disorders in traumatic brain injury', to the Speech Pathology Australia 2010 conference and the International Brain Injury Association 2010 conference in Washington, USA. This was a collaborative study with the Occupational Therapy Department and was funded by the RACV Sir Edmund Herring Memorial Scholarship.

Speech Pathologist Amanda Dwyer studies a videofluoroscopy recording in research involving swallowing exercises for radiotherapy patients with head and neck cancer.

Publications

1 Journal Article