Prehabilitation and the Prevention of Dysphagia in Head and Neck Cancer Patients

Abstract

Forty years ago, the first article on swallowing therapy appeared in the literature. It wasn't until twenty years later that articles related specifically to dysphagia therapy for head and neck cancer began to appear. In that early research, strategies such as diet modifications (e.g., pureed food, thickened liquids), positional modifications (e.g., head turn, chin tuck), and behavioral interventions (e.g., effortful swallow, Mendelsohn maneuver) were explored. Behavioral interventions described by these early researchers were aimed at rehabilitation of impaired swallowing physiology in the post-treatment period. In 2006, however, the first report of pre-treatment swallowing exercises for prevention of dysphagia in head and neck cancer patients appeared in the literature. Nearly a decade later, the jury is still out on the efficacy of prehabilitation for prevention of dysphagia in this population.

In this presentation, you will be provided with an overview of the evidence that currently exists on the efficacy of using behavioral interventions for dysphagia rehabilitation. Following this, the concept of prehabilitation will be explored from the perspective of cancer in general and, then, in relation to head and neck cancer specifically. Issues related to compliance, program flexibility, and standardization of therapy will be explored. The presentation will close with a discussion of what we still need to learn about prehabilitation as we move into the future of supportive care for head and neck cancer patients.

Short Bio for Jana Rieger

Jana Rieger is the Director of Research at the Institute for Reconstructive Sciences in Medicine and a Professor in the Faculty of Rehabilitation Medicine at the University of Alberta. Since 1999, her research has focused on understanding functional outcomes, including speech, swallowing, chewing and quality of life in patients with defects of the head and neck secondary to cancer and trauma. From 2004 – 2011, she was funded by the Alberta Heritage Foundation for Medical Research as a Population Health Clinician Researcher. Dr. Jana Rieger was one of four successful researchers to receive funding from the Alberta Cancer Foundation’s Transformative Program Competition in April 2014. Dr. Rieger and her team received $1.9 M over the next five years to support research related to developing technological interfaces for dysphagia rehabilitation in patients with head and neck cancer. Dr. Rieger has lectured internationally by invitation on functional outcomes related to defects of the head and neck and has published over 50 articles on research in this area.