

Effectiveness of Vital Stimulation in the Treatment of Patients with Dysphagia

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Abstract:

The purpose of this study is to determine the efficacy of Vital Stimulation Therapy and the percentage of patients demonstrating improved levels of swallowing function following this treatment. A retrospective review of 152 patients who received Vital Stimulation as a treatment modality during their dysphagia therapy session indicated that a large percentage of the patients demonstrated improvements in swallowing function. This was a pilot study and contained no control group.

Case:

The information presented in this study was collected as part of an internal review within the Speech Pathology Department at Pitt County Memorial Hospital, which is reported through the Information and Outcome Management program. The data collected was obtained through a review of 152 patients who received Vital Stimulation as a treatment modality during their dysphagia therapy session, as a standard of care. In conjunction with Vital Stimulation, patients also received a combination of other traditional dysphagia treatments including laryngeal/pharyngeal strengthening exercises, oral motor/manipulation exercises, and thermal stimulation.

Criteria for inclusion was patients at least eighteen years of age, who received Vital Stimulation Therapy, and completed a full course of treatment. A full course of treatment is defined as patients who had an initial instrumental swallow evaluation, at least five sessions of Vital Stimulation, and a post instrumental swallow evaluation. The purpose of conducting the instrumental evaluation is to determine a patient's swallowing diagnosis or severity of swallowing function, and the least restrictive food and liquid diet a patient can tolerate.

Results:

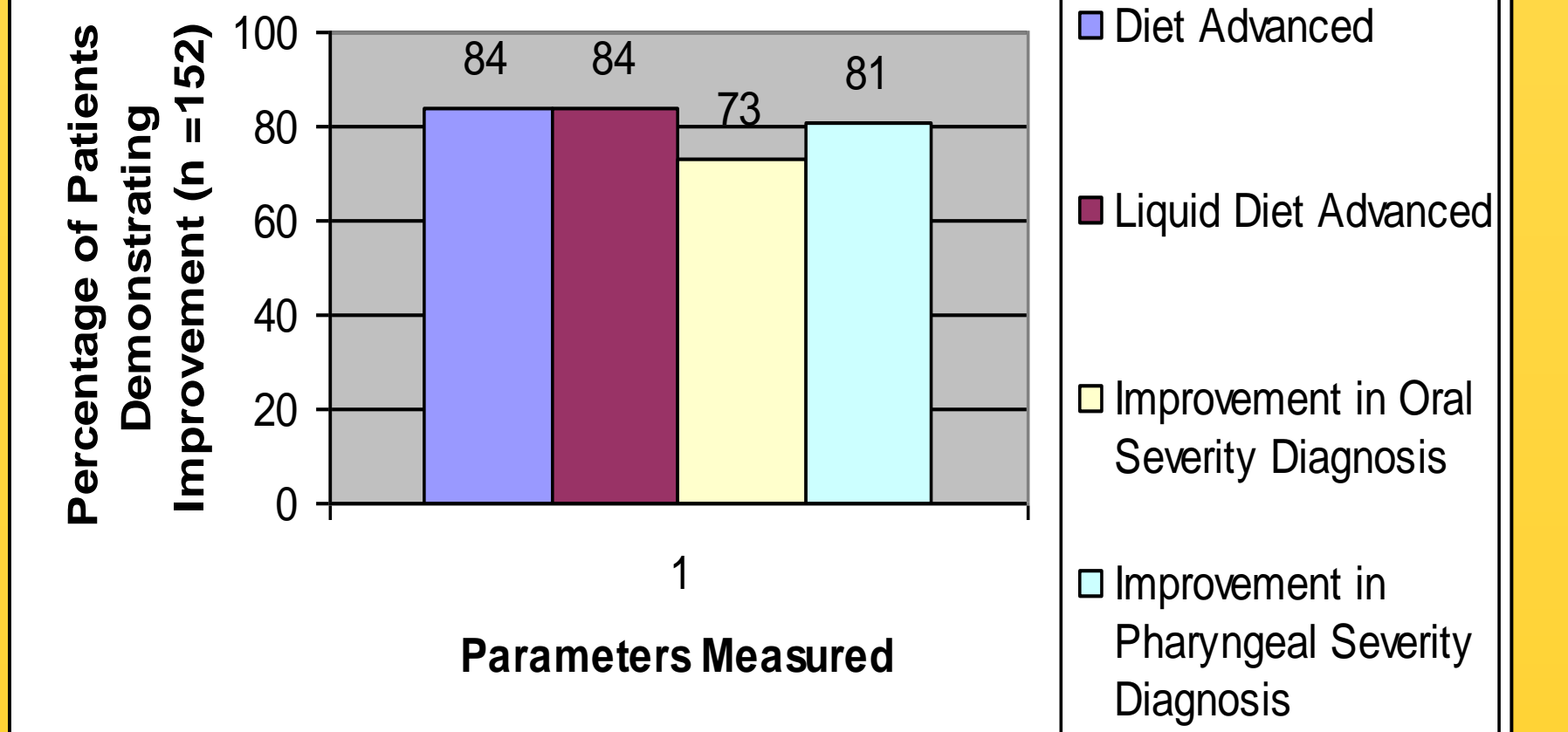
Of the patient's review, 84% demonstrated an advance in texture diet and 84% demonstrated an advance in liquid diet. In addition, 73% experienced an improvement in the diagnosis of oral severity and 81% experienced an improvement in the diagnosis of pharyngeal severity.

Discussion:

While a large percentage of patients who received Vital Stimulation as a treatment modality in their dysphagia treatment session did exhibit improvements in swallowing function, other confounding variables may have contributed to this progress. Confounding variables include spontaneous recovery and traditional dysphagia treatments, such as laryngeal/pharyngeal strengthening exercises, oral motor/manipulation exercises, and thermal stimulation.

In order to provide increased support for the efficacy of Vital Stimulation in the treatment of patients with dysphagia, additional research is warranted. The Speech Pathology Department at Pitt County Memorial Hospital is currently in the process of completing a research proposal to be submitted to the University and Medical Center Institutional Review Board. The proposal is relative to a blinded prospective study that will include an experimental group and a control group. The experimental group will receive Vital Stimulation in conjunction with traditional dysphagia treatments, while the control group will receive only traditional dysphagia treatments.

Improvements Noted in Dysphagia Patients Who Received Vital Stimulation



Introduction:

Dysphagia, or difficulty with swallowing, has a tremendous impact on a person's quality of life. Dysphagia can lead to aspiration of oral intake, which can be life threatening. Other associated problems include inability to maintain adequate nutrition and hydration, inability to maintain a healthy weight, and social repercussions of being unable to eat and drink. One modality used in the treatment of dysphagia is Vital Stimulation, a form of neuromuscular electrical stimulation (NMES) used for activation of muscles through stimulation of the intact peripheral motor nerves. The major goals are to strengthen weak muscles and to help in the recovery of motor control in order to improve swallowing function.

For more information about Vital Stimulation:

www.vitalstimtherapy.com