

Influence of Myofascial Release Techniques on Oesophageal Pressure in Laryngectomized Patients

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Introduction: In patients after total laryngectomy, increased tension in myofascial neck and arm areas might be observed. Via fascial continuity it has an adverse impact on the superior esophageal constrictor forming the “mouth of the esophagus”, which hinders learning of esophageal speech.

The Aim: To assess the effect of manual myofascial release techniques on esophageal pressure in patients after total laryngectomy.

Materials: 40 patients (12 F, 28 M), aged 43-75 (mean 56.8 years), 9 months to 13 years (average 3 years) after total laryngectomy, 35 patients (87.5%) after neck lymph node resection, 38 patients (95%) after radiotherapy.

Methods: Esophageal pressure was assessed using modified Seeman’s method. Manual myofascial release techniques were applied within head, neck, arms, upper trunk and upper limb areas. Wilcoxon and Shapiro-Wilk’s test was used for the purpose of statistical analysis.

Results: Statistically significant decrease of the mean esophageal pressure was observed after the physiotherapy treatment. The average pressure among the examined patients decreased from 37.9 to 26.6 mmHg.

Conclusions: The application of myofascial manual techniques in laryngectomy patients decreases the tension of pharynx and esophageal muscles, which in turn reduces the values of esophageal pressure. The lower esophageal pressure may accelerate the process of learning the esophageal speech, as well as improve patients’ quality of life.