Czy zszywanie zwieracza gardła dolnego po laryngektomii całkowitej jest korzystne?

Pharyngeal constrictor muscles closure after total laryngectomy is that really beneficial?

Czesława Tarnowska, Ewa Grochowska-Bohatyrewicz, Stanisław Bień, Jarosław Sieczka, Ewa Jaworowska, Jakub Lubiński

SUMMARY

High pressure of pharyngo-esophageal segment is the most important factor of impaired development of alaryngeal speech (esophageal speech, tracheoesophageal speech) after total laryngectomy. To prevent pharyngo-esophageal spasm in Department of Otolaryngology in Szczecin are used: pharyngoesophageal plastic surgery with interposition of vascular thyroid flap, two-layer (only mucosa) non-muscular pharyngeal closure and tree-layer closure (mucosa and muscle layer leaving inferior pharyngeal constrictor unsutured).

Aim of study: The aim of this study was to compare the pharyngo-esophageal pressure between patients after pharyngo-esophageal plastic surgery and following the non-muscular pharyngeal closure.

Material and methods: One hundred eighty two subjects after total laryngectomy were enrolled in this study, and included 108 patients subjected to the pharyngo-esophageal plastic surgery, 44 patients who underwent the two-layer pharyngeal closure, and 30 patients with the tree-layer closure. To evaluate the pharyngo-esophageal pressures manometric tests were performed, and to assess the pharynx morphology videopharyngoscopy was used.

Results: The average pharyngo-esophageal pressure in the group after the pharyngo-esophageal plastic surgery was 32 (min.-5, max. 50) mmHg. After the two-layer non-muscular pharyngeal closure mean pressure was 35 (min.-17, max.-40) mmHg, and after the tree-layer non-muscular pharyngeal closure the average pressure was 22.42 (min. 5, max. 40) mmHg. The average pharyngo-esophageal pressure was significantly lower (p<0.01) among patients after the tree-layer non-muscular closure.

Conclusion: The study suggests that the tree-layer non-muscular pharyngeal closure with inferior pharyngeal constrictor unsutured is the preferable method to prevent pharyngo-esophageal spasm after total laryngectomy. However, the efficacy and safety of this surgical procedure should be explored in further multicenter studies.

Hasła indeksowe: laryngektomia całkowita, mowa przełóbkowa, ciśnienie w obrębie zwieracza gardłowo-przełykowego, plastyka zwieracza gardłowo-przełykowego, niezszywanie warstwy mięśniowej gardła.

Key words: total laryngectomy, esophageal speech, pharyngo-esophageal pressure, pharyngo-esophageal plastic surgery, nonmuscular closure of pharynx