Perceptiv-acoustic characteristic after supracricoid laryngectomy with cricohyopexy or cricoepiglottopexy

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Summary

Introduction. Supracricoid laryngectomy with cricohyopexy (CHP) and cricoepiglottopexy (CHEP) are the one of functional laryngectomy. Aim. The aim of the study is phonation assessment of the reconstruction larynx.

Material and methods. The examined group consisted of 58 patients (49 males and 9 female). An average age 54. 32 patients underwent CHP and 26 -CHEP. CHP was performed in following modes: a) 1 arytenoid cartilage left in 17 cases, b) 2 arytenoid cartilages left in 14 cases and c) 1 arytenoid cartilage left and second was resected with subsequent reconstruction in 1 case. The arytenoid cartilage was reconstructed in 19 cases (8 after CHP and 11 after CHEP). The vascularized thyroid lobe was used to the reconstruction of arytenoid cartilage in 8 cases (6 after CHP and 2 after CHEP), cuneiform or corniculate cartilage was used in 4 patients (1 CHP and 3 CHEP) and mucous membrane in 7 cases (1 CHP and 6 CHEP). Result. Socially efficient speech was found in 74% patients and the results were better after CHEP. Conclusion. The phonetic-acoustic structure of voice and resonant speech was considerably different from the phonetic-acoustic structure of voice and speech under physiologic conditions. These differences applied to segmental (formant structure, frequencies, noise range), as well as suprasegmental voice features.