Zastosowanie metody percepcyjnej i wideostroboskopii w przewlekłych stanach przerostowych krtani leczonych chirurgicznie

Perceptual method and videostroboscopy in patients with vocal fold hypertrophy underwent microsurgery

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Summary

Introduction: Chronic hypertrophic laryngitis concerns many people in our population. Their etiopathogenesis is complicated and usually connected with exogenous harmful factors like occupational or environmental exposure. Organic voice disorders of the larynx, particularly concerning vocal folds are the cause of dysphonia. Both surgical and conservative methods in the treatment of patients with laryngeal hypertrophy are applied. Objective assessment of the voice improvement after microsurgery is the subject of discussion of many authors. The problem of voice improvement is rarely approached to in the comprehensive way, that is with reference to activity and anatomy of the larynx. The basic aim of this research was to assess phonation function of the larynx after microsurgery on the basis of subjective and videostroboscopic voice analysis. The second aim was to estimate the surgical treatment effectiveness depending on vocal fold hypertrophy extensiveness. Material and method: The research was conducted on 50 subjects chosen from the population of patients with vocal fold hypertrophy treated at the Department of Laryngology Silesian Medical Academy in Zabrze from January to December 2003. All the examined patients underwent classical microsurgery. Voice quality examinations were done just before microsurgery and 3 months after the operation. On the basis of histopathological results, following diagnosis were established: vocal fold polyps (oedematous, teleangiectaticus and inflammatorius), oedema Reincke, laryngeal papilloma, laryngeal granuloma and cyst. The research methodology included: perceptual voice examination based on GRBAS scale (G - grade; R - roughness; B - breathiness; A - asthenicity; S - strain) and assessment of vibrations of vocal folds in videostroboscopy. Examination results in two groups with different extensiveness of vocal fold hypertrophy were compared. The control group presented 30 subjects without any voice disorders who did not use their voice for professional purposes. Results: In both groups (with minor and extensive vocal fold lesions) significant improvement in perceptual and videostroboscopic voice parameters was observed. The results in the group with minor vocal fold lesions were better after microsurgery. Conclusions: The methodology based on the application of the two methods of voice examination could be an objective rate in the estimation of the treatment progress.