Summary

Nasal obstruction is one of the most common problems the otorhinolaryngologist deals with at his office. Etiology of the nasal obstruction is various and determinates the treatment possibilities.

Analysis of the factors influencing nasal patency is mentioned in the preliminary part of the work. The nasal obstruction is determined by statical and dynamical factors. The two factors can be differentiated by a decongestant test. The evaluation of the test by means of RMM and AR is presented in the clinical part of the work.

Another aim of the study was to work out a standardised diagnostical protocol for patients with nasal obstruction. There are certains discrepancies within diagnostics as to which diagnostical method most accurately reflects the degree of nasal obstruction. What we found out in our study is, that subjective and objective measurements of the nasal patency and endoscopical findings do not always correlate. One of the reasons is that each of these methods is focusing on different aspects of the nasal airway. These are complementary methods, not supplying. The diagnostical logaritmus in patient with nasal obstruction consists of the assessment of patient's subjective perception of nasal patency (questionnaire), rhinoendoscopical examination, examination with AR, and active anterior RMM including decongestant test. It is necessary to emphasize that the most important part of the diagnostical algorithm is the correct interpretation of all of the outcomes (subjective and objective) in every individual patient.

The experimental part of the work deals with the histomorphologic changes after laser treatment and RFITT. The changes found in the turbinates treated by diode laser were more severe, with more intensive tissue damage and less prominent regenerative and reparative changes. This corresponds with the histopathological findings, as in the case of diode laser treatment, the damage of the tissue is more severe, and the regenerative and reparative processes are less prominent.

We implemented the results of the experimental task into therapeutic protocol that we use at our deparment. Method of choice is a medicament therapy in compliance with the international standard. Local corticosteroids play the main role in the therapy. Surgery is indicated in case of medicament therapy failure. Method of choice is RFITT which was found the most considerate of the surgical methods. The laser turbinoplasty is suitable for severe mucosal hypertrophy or after previous ineffective RFITT. Shaver turbinoplasty is preferred for the most severe mucosal hypertrophy with polypous degeneration.