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**Title:** Status of upper airways in exacerbation of COPD

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**Body:** Environmental tobacco smoke is the most significant factor of development and progression of COPD. Besides the pathological effects of environmental tobacco smoke on upper airways cannot be excluded. Purpose of our study was to study the condition of upper airways at exacerbation of COPD. Twenty patients (twelve men and eight women) with the second and third stages of COPD have been examined, index of a smoker was  $29.3 \pm 1.2$ . Average age of patients was 57.9. Control group included twenty non-smokers comparable in age and sex, not having respiratory disease. Study of condition of upper airways included the anterior active rhinomanometry, transport time of the saccharin, endoscopic examination of nasal cavity, X-ray computed tomography scans paranasal sinus, videostroboscopy, fibrolaryngoscopy, estimation of acoustic analysis of voice. Changes in paranasal sinus were characterized by appearance of thickening of mucosa on the X-ray computed tomography have been determined for sixteen patients with COPD. According to Lund-Mackay scale the average index was  $3.5 \pm 0.2$ ;  $p < 0.01$ . Elongation of transport time of the saccharin as the index of mucociliary clearance of nasal cavity mucosa has been determined, average index in the group was for fifteen patients  $28.05 \pm 2.1$ ;  $p < 0.01$ . For eight patients the statistically distinguishable change in larynx has been shown as thickening of free surface of vocal cords in the form of Reinke's space edema. Thus we determined frequent occurrence of upper airways pathology in the form of edema of paranasal sinus mucosa, elongation of transport time of the saccharin of nasal mucosa, changes in vocal cords in the form of Reinke's space edema in patients with exacerbation of COPD.