THE EFFECTS OF PULMONARY REHABILITATION CONDUCTED IN THE SALT MINE AND ON THE SURFACE IN COPD PATIENTS

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Pulmonary rehabilitation (PR) is recommended for patients with chronic obstructive pulmonary disease (COPD). A climate therapy in the salt mine chambers helps people suffering from chronic respiratory diseases.

The aim of the study was to determine if different climatic conditions can influence the short- and long term effects of the PR. The study was conducted: 01.05.2015-15.03.2016.

The effects of 3-week PR program conducted in the salt mine (PRM) are compared with those of 3-week PR program realized on the surface (PRS) in COPD patients.

After randomization, effects on lung function, exercise performance (6-minute walking test – 6MWT), dyspnea (mMRC), and impact of COPD on patient’s life (COPD Assessment Test - CAT) were assessed in 40 COPD patients (FEV1%VC<0,7 reversibility after salbutamol <12%), from group B (N=22) and D (N=18) according to the GOLD guidelines.

Place of PR influenced significantly the distance in 6MWT (p=0,0145), dyspnea (mMRC) (p=0,014) and CAT results (p=0,0157) direct after PR: the improvement was higher in the PRM group. There was no influence of place of PR on respiratory parameters (FEV1, FEV1%VC) after PR. After 6 month the values tended to return to baseline, but still the place of PR significantly influenced the distance in 6MWT (p=0,0450).