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Title: Inhaled iloprost did not influence cytokines levels in patients with different forms of pulmonary hypertension

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Body: The aim: to study effect of 12wk therapy with inhaled iloprost in pts with pulmonary hypertension (PH) on functional status, Echo parameters, systolic pulmonary artery pressure (SPAP) and concentration of interleukins-1β (IL-1β) and interleukin-6 (IL-6). Methods: In study we included 9 pts (aged 44,89±13,03 yrs) with selected forms of pulmonary arterial hypertension(n=6), chronic thromboembolic pulmonary hypertension(n=3). Inclusion criteria: functional class III-IV, distance in the 6-minute walking test (6MWT)<400m, stable standard PH therapy for previous 12wks, systolic BP>90 mm Hg. On top of background therapy inhaled iloprost was started in daily dose of 45mg (5 mg X 9times per day). Iloprost was delivered using vibrating-technology nebulizer (Micro AIR® U22, OMRON). 6MWT with Borg index assessment, transthoracic Echo, IL-6, IL-1β (by immunoenzyme method with Bender MedSystems, Austria) serum levels were analyzed at baseline, at wk2 and wk12 visits. Results: The percentage an increase in distance 6MWT at baseline (375m [316,3-395,0]) and wk 12 (403,0[278-475,5]) was 10 percent(p=0,465). After 12wk was decreased SPAP, as evidenced by Doppler EchoCG (100,0 mmHg[99,00-117,50] versus 96,50 mmHg[85,25-114,50], p=0,028); right ventricular outflow tract proximal (RVOT-Prox) assessed by Echo before and after inhalation was 4,00 cm[3,50-5,00] and 3,50 cm[2,75-4,00] respectively (p=0,046). Levels of IL-6, IL-1β didn't differ significantly from baseline. Conclusions: Inhaled iloprost to wk 12 did not influence IL-6, IL-1β levels.12wk treatment with iloprost resulted in some tendency of 6MWT distance increase, significant SPAP decrease leading to RVOT-Prox reduction.