**STUDY THE EFFECT OF EXERCISE ON SYSTOLIC PULMONARY ARTERY PRESSURE IN HEALTHY SUBJECTS**

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Introduction: As no data is available concerning the cut-off value defining abnormal pulmonary artery systolic pressure (PASP) response in subjects of various ages, the aim of this study is to assess physiological PASP response to exercise in healthy individuals of various ages.

Material and methods: One hundred and twenty three healthy volunteers, aged 30 to 70 years, underwent Doppler echocardiographic measurements at rest and after treadmill exercise test. Pulmonary artery systolic pressure was estimated at rest, and immediately after peak exercise using Bernoulli formula (four times tricuspid valve regurgitation velocity squared adding an estimated right atrial pressure).

Results: Lower and upper limits of PASP during rest was 7 and 28 mmHg and after peak exercise was 14 and 48 mmHg respectively. After exercise, PASP increased from rest (14±4 mmHg) to peak (25±7 mmHg). Pulmonary artery systolic pressure during rest and peak exercise, increased with age, but has no correlation with body mass index or gender.

Conclusion: Pulmonary artery systolic pressure at peak exercise can frequently reach values MORE than30 mmHg in healthy individuals with good exercise capacity, especially in elderly individuals, which goes beyond pathologic definitions of pulmonary hypertension.