conferenceseries.com

2nd International Conference on **Hypertension & Healthcare**

and

2nd International Conference on Non-invasive Cardiac Imaging, Nuclear Cardiology & Echocardiography

September 11-13, 2017 | Amsterdam, Netherlands

Newly discovered way of the function of cardiovascular system and the latest theory of the development of hypertension and other cardiovascular diseases

Vladimir A Mikhaylov Eternity Medicine Institute, Dubai

Statement of the Problem: It is known that the power of the heart alone is about 3.3 W, and the length of the vessels is about 100,000 km. It made us doubt that with this power how the heart can deliver blood to the capillary bed. Effects on the vascular wall of various modes of laser radiation (wavelength of 630-640 nm.) showed that if continuous radiation did not affect the parameters of blood pressure, frequency regimes had an impact. This leads us to the idea that the root cause of the development of different cardiovascular diseases is the system disturbance of the activity of the vascular pump leads to the increase of intra vascular pressure and the emergence of the hypertensive illness and the coronary heart disease. Theoretical Orientation: To confirm an idea that the main role in the delivery of blood to tissues primarily played by the vessels and not the heart, we conducted the following studies: 1. Built a new mathematical model 2. Changed features of the anatomical structure of different types of arteries 3. Explained how the synchronization of the heart and blood vessels transporting blood to the tissues

Conclusion & Significance: The main role in transportation of blood to the capillary bed played by an artery, the power of the heart is only 0.49 -0.27% of the power needed to transport blood to the capillary bed. The vascular pump is regulated by the frequency of contractions of the heart muscle and is tightly synchronized with the work of the heart. The rapid spread of the pulse wave creating a suction effect. Following the reduction of the vessel wall, the blood just drawn from the aorta and large arteries to the smaller vessels and down to the capillary bed. Systematic irregularities in the vascular pump are the starting point in the development of hypertension. These illnesses may be both local and systemic, depending on the size and location of pathological changes in the vascular wall.

Recommendations: It is necessary to conduct further studies to confirm the mechanisms of development of hypertension.

Biography

Vladimir A. Mikhaylov received his medical degree from the Ryazan Medical Institute named after I.P. Pavlov (M.D.), and pursued his PhD at same Institute. He received a degree Sc..D., at National Center of Laser Medicine in Moscow. He is a Physician of Eternity Medicine Institute, Dubai. He is the member of international editorial board of the "Laser Therapy".

mlasass@mail.ru

Notes: