#### THANKS FOR THE WARM WELCOME!



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## N. Karazin Kharkiv National University School Of Medicine



# FREQUENCY OF OCCURRENCE OF DIFFERENT TYPES OF ORTHOSTATIC REACTIONS OF BLOOD PRESSURE IN HEALTHY VOLUNTEERS



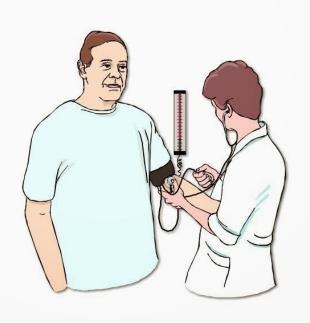
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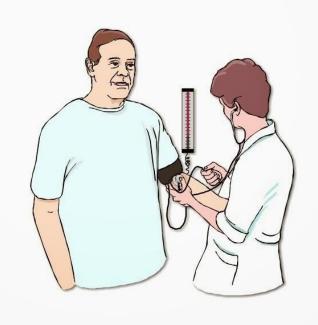
## OBJECTIVE 1

To study the frequency of occurrence of different types of orthostatic reactions (OR) of blood pressure (BP) during the active standing test (AST) in healthy volunteers.



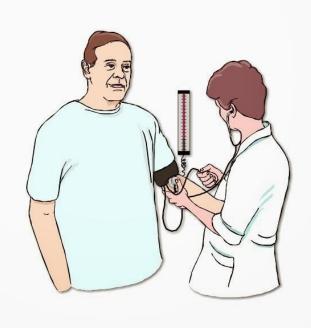
## OBJECTIVE 2

Almost every person at least once in a life experienced weakness or dizziness with a sharp rise from the bed. This is the body's response to the redistribution of blood under the influence objective gravity. For an assessment of the changes occurring in this case, an AST is performed.



## OBJECTIVE 3

AST causes a sympathetic response triggered by a baroreflex response to initial blood pressure reduction, resulting in an increment on the heart rate and blood pressure.



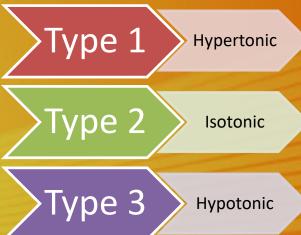
#### **Material and Methods 1**

Were examined 103 healthy volunteers (57 men and 46 women), aged  $(23, 8 \pm 3, 6)$  years. We take into account the raw data of blood pressure. The study was conducted in the morning, 24 hours before it was limited to the use of coffee, alcohol, medication, and after 30 minutes physical activity. Blood pressure was measured by the method of Korotkov by tonometer Microlife BP AG120 in a lying position after 5 minutes of rest, and after 3 minutes after the transition to a standing position.

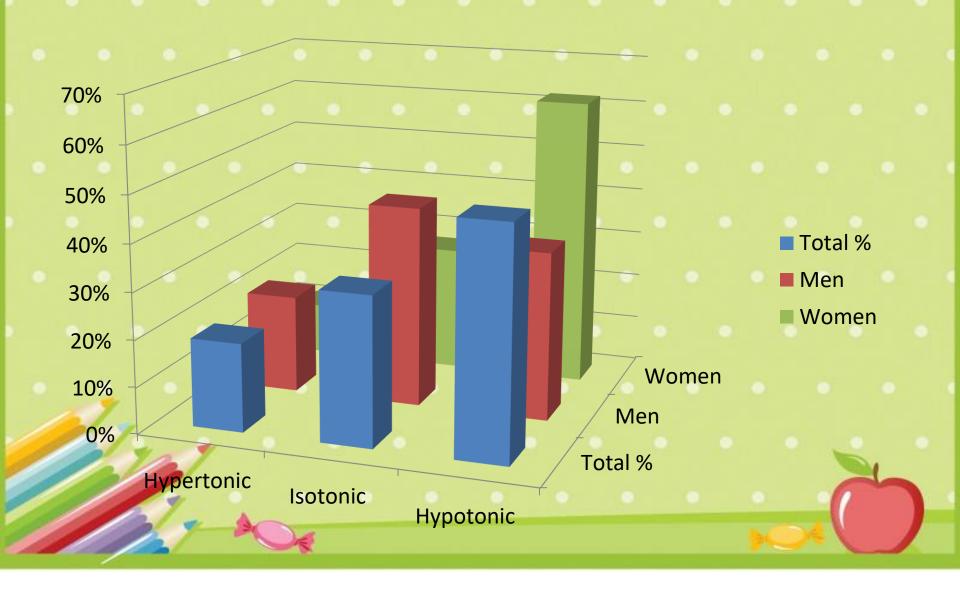
#### **Material and Methods 2**

Healthy volunteers were referred to one of three types of OR BP:

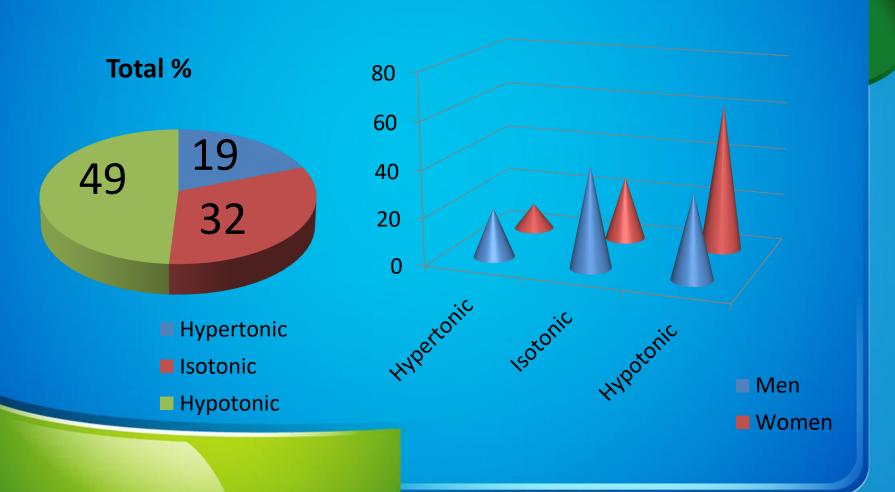
Type 1 - hypertonic (increase BP by more than 5%); Type 2 - isotonic (BP changes within ± 5%); Type 3 - hypotonic (BP decrease by 5% or more). For statistical evaluation used parametric criteria (mean - M and the standard deviation – sd).



## Results 1



## RESULTS 2



#### CONCLUSIONS

The high frequency of hypotonic OR BP, especially in women (62%), indicates the importance of targeted analysis of such violations of autonomous regulation in transient processes and requires special research.

