

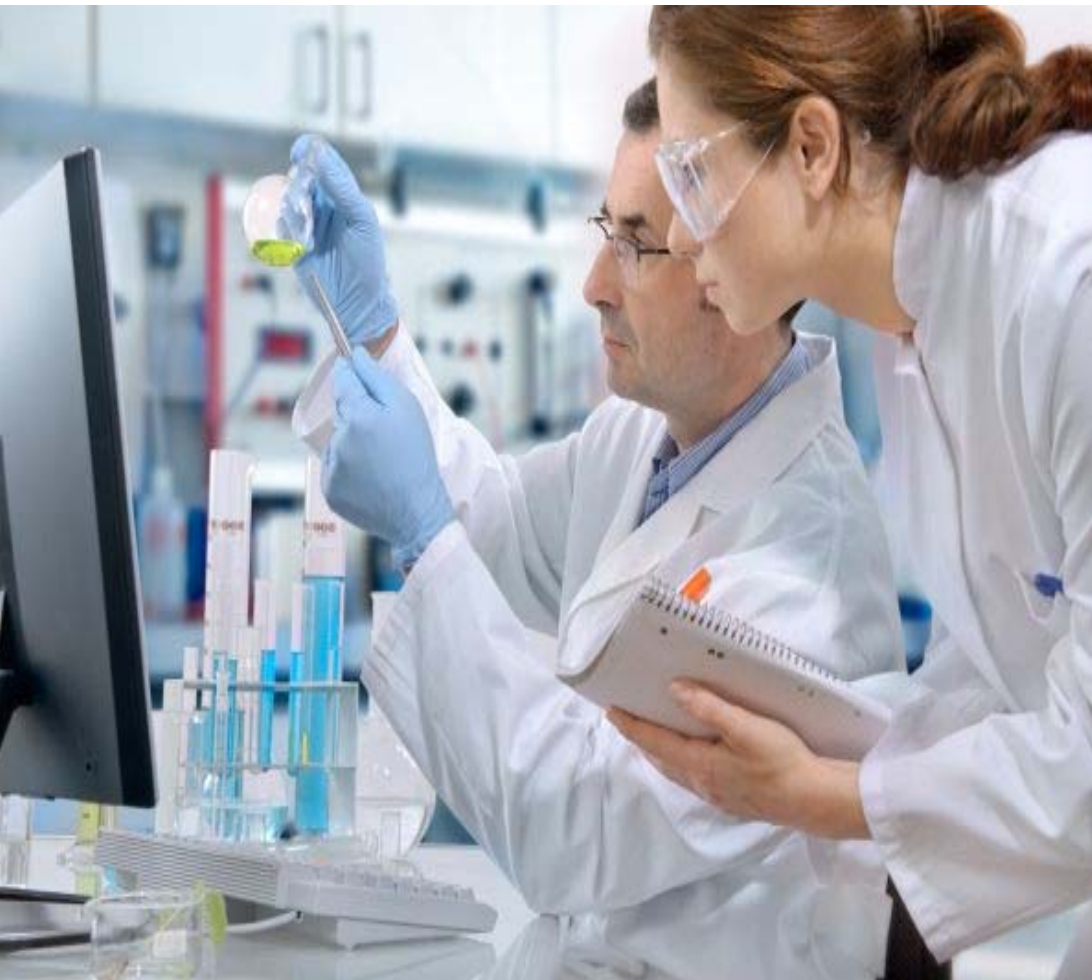
«Homocysteine levels in patients with myocardial infarction against the background of the chronic obstructive pulmonary disease»

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The purpose of the investigation is:

To examine the level of plasma homocysteine (HCY) in patients with myocardial infarction (MI) against the background of the chronic obstructive pulmonary disease (COPD).



The object of the study:

***In total 188 patients were examined.**

***Group 1 - 50 patients with MI;**

***Group 2 - 88 patients with MI+COPD;**

***The control group - 50 healthy people of the Astrakhan region.**



The research methods are:

- physical
- laboratory
- instrumental
- special
- functional tests



-Enzyme-linked immunosorbent assay (ELISA) was used to determine the HCY levels.



The relevance

Nowadays COPD is one of the leading cause of morbidity and mortality (GOLD, 2019).

Cardiovascular diseases are detected in patients with COPD identified in approximately 50%.

In general results of researches convince of socially medical importance of the problem of the combined pathology and of necessity of its further study.

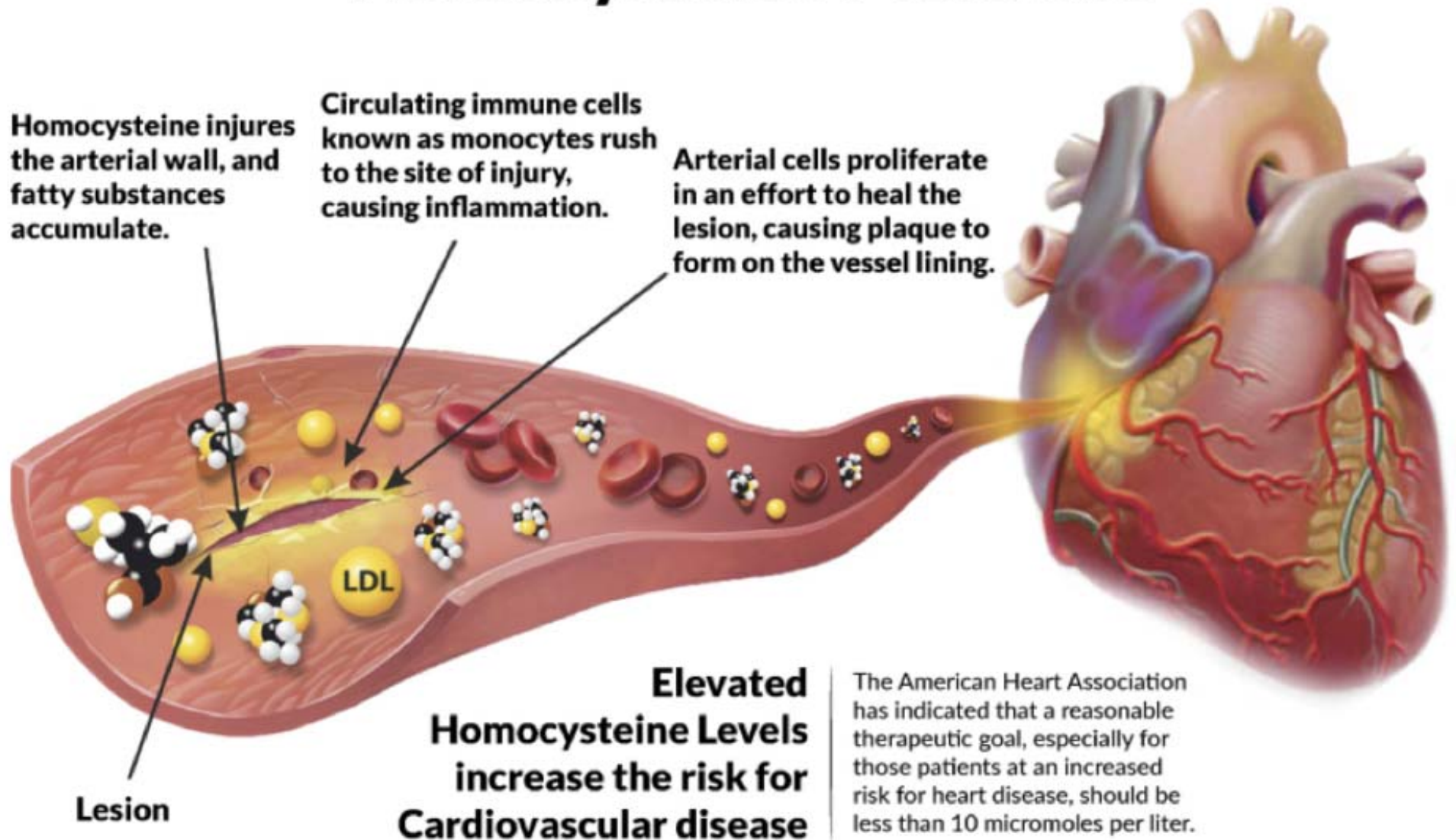


Homocysteine Molecule

Homocysteine injures the arterial wall, and fatty substances accumulate.

Circulating immune cells known as monocytes rush to the site of injury, causing inflammation.

Arterial cells proliferate in an effort to heal the lesion, causing plaque to form on the vessel lining.

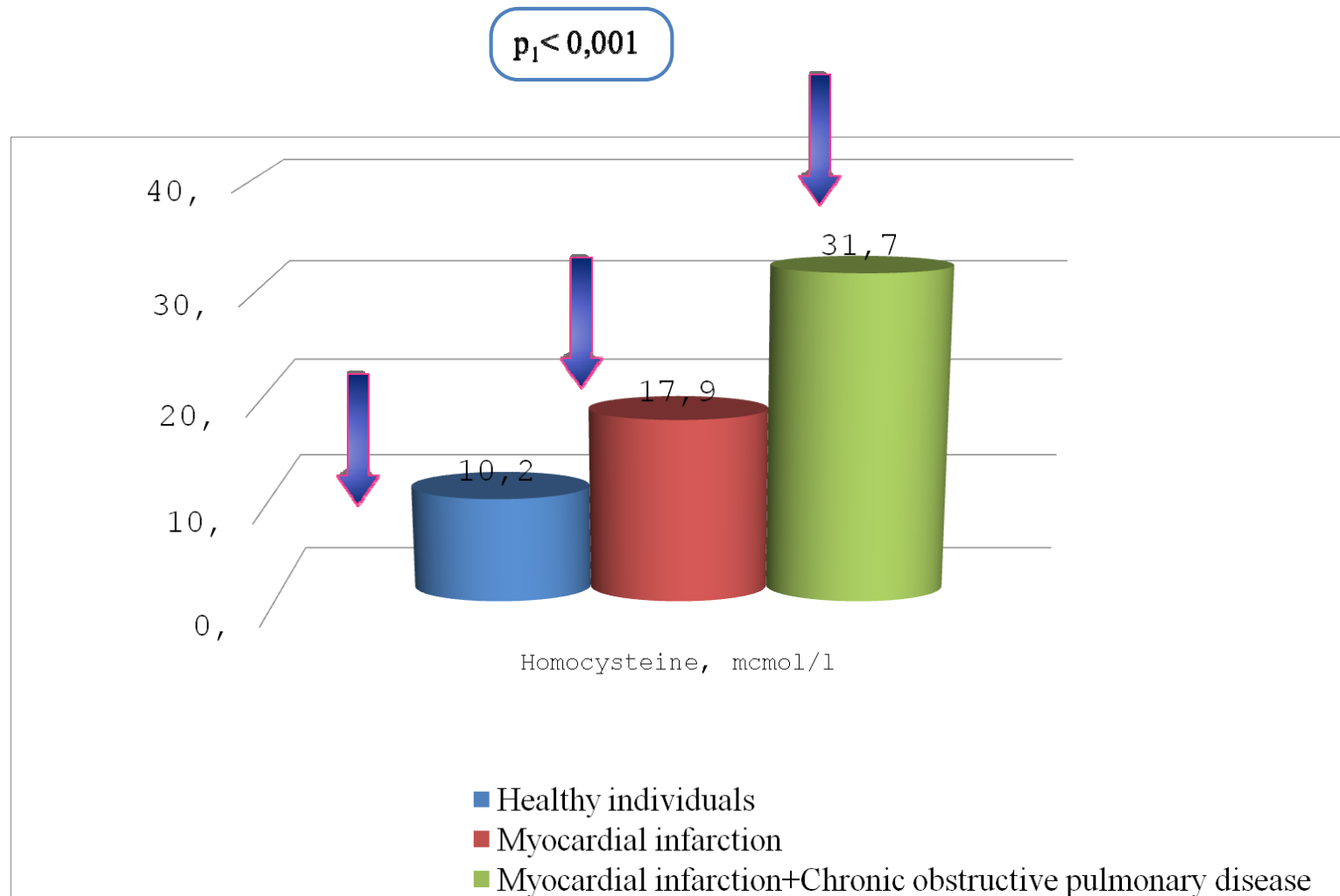


**Elevated
Homocysteine Levels
increase the risk for
Cardiovascular disease**

The American Heart Association has indicated that a reasonable therapeutic goal, especially for those patients at an increased risk for heart disease, should be less than 10 micromoles per liter.

Results

HCY levels in patients with MI and with MI+COPD



Conclusions

It was revealed that patients with MI+COPD have the greatest rising of the concentration of plasma HCY both in comparison with patients with a MI, and in comparison with healthy individuals.



It is shown that patients with a comorbid pathology - MI+COPD - have an increased level of HCY 3 times more often than somatically healthy individuals, and the differences are statistically significant.



Homocysteine is an important object of researches in medical science.

Many aspects have not been studied or are controversial.

The results of the study will reduce the duration of hospital stay, costs of their state examination, treatment and rehabilitation on average 3%.



Thank you for attention!

