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HYPERHOMOCYSTEINEMIA AS A MARKER OF CARDIOVASCULAR DISEASE

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Disclosure

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We have no any potential conflict of interest

HYPERHOMOCYSTEINEMIA AS A MARKER OF CARDIOVASCULAR DISEASE

Effects of homocysteine

- increased peroxidation injury
- proliferation of smooth vessel,
- promotion of monocytic chemotaxis
- enhanced cytotoxicity and inflammation
- promotion of clotting
- inhibition of anticoagulation
- direct effects on endothelial cells and activation of platelet aggregation

Materials

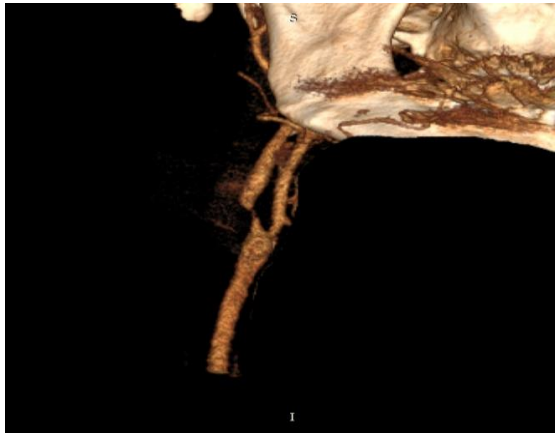
70 patients

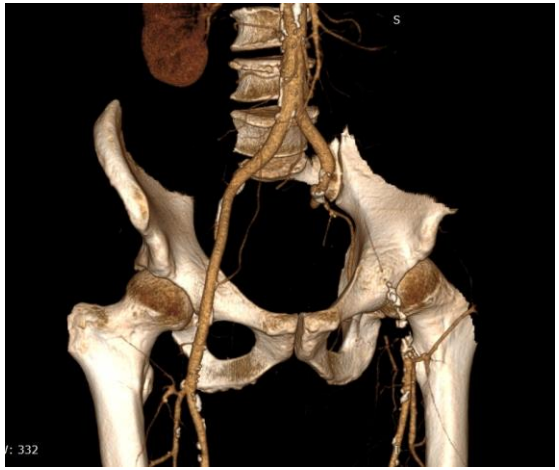
Average age 62,1±7,4 years

Groups

1. Coronary artery disease (CAD)
2. Carotid artery disease (CA)
3. Peripheral artery disease (PAD)
4. Multifocal lesions

Results





Most of patients had hyperhomocysteinemia. Average level was 22,4±11,7 mmol/l.

A significant increase in patients with a combination of carotid and coronary atherosclerosis (24,6±9,1 mmol/l), in multifocal atherosclerotic lesions (23,6±14,9 mmol/l).

Hyperhomocysteinemia more than 30 mmol/l in 69.2% correlated with the combination of CAD and CA.

The frequency of the complicated course of the disease was 76.9%.

Conclusion

1. The homocysteine level is a marker of cardiovascular risk.

2. Hyperhomocysteinemia is associated with multifocal atherosclerotic lesions, mostly CA+CAD.

3. Hyperhomocysteinemia more than 30 mmol/l is typical for patients with complicated course of atherosclerosis

4. Further study will allow developing new directions in the management and prevention of atherosclerosis.

Thank you for attention

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