Chronic alcohol abuse leads to malnutrition, and thus to the deficiency of many nutrients, mainly vitamins A, B, C, D, E and K and microelements (Zn, Ca, Se). Reduction of biological functions of vitamins and oxidative stress induced by ethanol can have serious clinical consequences, including macrocytic and megaloblastic anemia, neurological disorders, and chronic liver diseases. Deficiency of folic acid is connected with increased concentration in blood of homocysteine, named “cholesterol of XXI. century”. High levels of homocysteine in blood are in turn associated with an increased risk of cardiovascular diseases. Hyperhomocysteinemia may serve as one of the markers of alcohol toxic effects.

**LITERATURA**


CASAGRANDE G., MICHT F., 1989. Alcohol-induced bone marrow damage: status before and after a 4-week period of abstinence from alcohol with or without disulfiram. A randomized bone marrow study in alcohol-dependent individuals. Blut 59, 231–236.


