

# International Conference on Gastroenterology (ICGE-2025)

Conference Proceedings

April 26, 2025 - Barcelona, Spain

## The Difference in Metabolic and Chronological Age is Associated with Steatosis and Liver Fibrosis

Marakhouski Yury

Department of Internal Medicine, Gastroenterology and Nutrition with training and Advanced Training Courses, Belarus

**Background:** The two most common types of fatty liver disease (steatosis) are nonalcoholic fatty liver disease (NAFLD) and alcoholic fatty liver disease (AFLD). NAFLD affects about 30% of people in Western countries and 10% of people in Asia. In the United States, rates are about 35%, with about 7% having severe NASH. NAFLD affects about 10% of children in the United States. Fat accumulation in the liver is accompanied by a disorder of a series of metabolic processes, i.e. metabolic dysfunction with multiple parallel metabolic shocks throughout the body.

**Material and Methods:** A monocentric, controlled, randomized study was conducted involving 20 practically healthy individuals and 31 patients with hepatomegaly without additional specific symptoms of liver pathology. Liver steatosis degree measurement by the Controlled attenuation parameter (CAP) transient elastography. Metabological age (Met-age) was determined based on tetrapolar multifrequency bioimpedancemetry with vector analysis (BIM-V).

**Results and Discussion:** MET-age younger to CHR-age has significantly more Body Cells Mass (BCM) proportion (50,5 (95%CI =50,0-51,1) vs. 43,9(95%CI =42,8-45,0) and less content of Fat Mass (in kg) fixed -14,7 (95%CI =13,7-15,6) vs. 27,9(95%CI =25,3-30,5). The parallel comparison analysis the MET-age, steatosis (STe) and liver fibrosis (F) show following. In practically healthy people Met-age oldest 2 years or more than CHR-age (Age Diff) was found in the subgroup with severe steatosis (S=3) in 88,9% (8 of 9)(95%CI=51,8 – 99,7) and in 1 of 11 individuals with mild.