2- Conference Series Den Access | Peer Reviewed | Conference Proceedings

Proceedings of International Educators Conference

Hosted online from Rome, Italy.

Date: 25th May - 2024

ISSN: 2835-396X Website: econferenceseries.com

RISK FACTORS FOR THE DEVELOPMENT OF FATTY LIVER IN ELDERLY PEOPLE LIVING IN THE FERGANA VALLEY OF THE REPUBLIC OF UZBEKISTAN

Usmonov E. I. Vasilevski E. A.



Globally, the proportion of older people aged 65 years and over continues to increase (5). According to UN statistics, in 2019, the elderly population aged 65 years and over accounted for 9% of the total population, and this proportion is projected to increase to 16% by 2050 and exceed 23% by 2100 (3,6). Age is a major risk factor for the development of chronic diseases, and more than 50% of older adults suffer from at least one type of chronic disease (2,4). These chronic diseases pose a significant healthcare burden that will become even worse in the future (1,7). Therefore, it is advisable to prevent the occurrence of these diseases as early as possible.

Target. Currently, data on the epidemiology of fatty liver disease in older people in Central Asia are sparse. We assessed predictors of the development of fatty liver and high risk of liver fibrosis in elderly people living in the Fergana Valley of the Republic of Uzbekistan.

Keywords: progressive fibrosis; aged people; metabolic syndrome; non-alcoholic fatty liver disease.

Materials and methods

We examined a total of 109 people (average age 75.6 ± 6.3 years) living in various regions of the Fergana Valley of the Republic of Uzbekistan from 2020 to 2023. Subjects under the age of 75 years, suffering from alcoholism, and having a history of viral hepatitis B and C were excluded from the study. Fatty liver disease was diagnosed by abdominal ultrasound using the fatty liver ultrasound indicator, a semiquantitative measure assessing severity (normal, mild, and moderate to severe). The score was used to predict high risk of developing fibrosis. Using a multivariate logistic regression model, we identified predictors of fatty liver and high risk of fibrosis.



Proceedings of International Educators Conference

Hosted online from Rome, Italy.

Date: 25th May - 2024

ISSN: 2835-396X **Website:** econferenceseries.com

Results

Among elderly people permanently residing in the regions of the Fergana Valley of the Republic of Uzbekistan, the prevalence of fatty liver is 41.9%, and the high risk of developing fibrosis is 12.3%. The prevalence of fatty liver disease decreased (from 44.5% to 31.8%), and the high risk of advanced fibrosis increased significantly (from 3.9% to 27.0%) with age (p < 0.05). Metabolic syndrome is a risk factor for the development of fatty hepatosis (OR - 3.19; 95% CI 2.41–4.22), but not a high risk for the development of fibrosis (OR - 0.67; 95% CI 0.41–1.08). Hypertriglyceridemia reduces the risk of liver fibrosis in older people (OR - 0.53; 95% CI 0.33–0.87).

Conclusions

Fatty hepatosis is widespread among older people permanently residing in the regions of the Fergana Valley of Uzbekistan, affecting more than 40% of this population. Age is a high risk factor for the development of liver fibrosis, and with age the disease is likely to progress from steatotic to fibrotic stages.

Literature:

- 1. Drapkina O.M. Non-alcoholic fatty liver disease and cardiovascular risk: state of the problem. Rational Pharmacotherapy in Cardiology. 2017. T. 13, No. 5. P. 645-650.
- 2. Song R., Hu M., Qin X., Qiu L., Wang P., Zhang X., Liu R., Wang X. The Roles of Lipid Metabolism in the Pathogenesis of Chronic Diseases in the Elderly. Nutrients. 2023 No. 15(Vol/15) P. 3433
- 3. United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects 2019: Highlights. 2019. [(accessed on 15 June 2022)]. ST/ESA/SER.A/423.
- 4. Katsiki N., Kolovou G., Perez-Martinez P., Mikhailidis D.P. Dyslipidaemia in the Elderly: To Treat or Not to Treat? Expert Rev. Clin. Pharmacol. 2018 No. 11 R. 259–278.
- 5. Zemedikun D.T., Gray L.J., Khunti K., Davies M.J., Dhalwani N.N. Patterns of Multimorbidity in Middle-Aged and Older Adults: An Analysis of the UK Biobank Data. Mayo Clin. Proc. 2018 No. 93 R. 857–866.



Proceedings of International Educators Conference

Hosted online from Rome, Italy.

Date: 25th May - 2024

ISSN: 2835-396X **Website:** econferenceseries.com

6. Yan Y., Wu T., Zhang M., Li C., Liu Q., Li F. Prevalence, Awareness and Control of Type 2 Diabetes Mellitus and Risk Factors in Chinese Elderly Population. - BMC Public Health -2022 - No. 22 - R. 1382.

7. Ames B.N. Prolonging Healthy Aging: Longevity Vitamins and Proteins. - Proc. Natl. Acad. Sci. USA. - 2018- No. 115 - R.10836–10844.



