2. CLINICAL ”ODYSSEY” IN WILSON'S DISEASE PATIENTS FROM THE REPUBLIC OF MOLDOVA

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Introduction. Wilson's disease (WD) presents high clinical heterogeneity, independent of age and sex. In our country, it is the first study that analyzes the phenotype of patients with this genetic disorder.

Aim of study. The study aims to evaluate the clinical features of patients with WD in the Republic of Moldova.

Methods and materials. A retrospective and prospective study was performed on 170 people suspected of WD, between 2006 and 2023. The modified Leipzig Scoring System was used to specify the diagnosis; a score ≥ 4 points establishes the diagnosis of WD. All patients were genetically tested by the Sanger sequencing method. Statistical analysis was performed using EpiInfo.

Results. Out of 170 people, 50 patients had a score of≥ 4 points. The mean age was 23 years ± 9.3 (range 5-46 years), and the median was 24.5 years. 23% of pts are <18 years old. The female/male ratio is 1:1.5. The average duration of the period of the diagnosis was 25.7 months (range 1-96 months). All persons were of Caucasian origin. No consanguineous relationships have been described. Hepatic onset was associated in 43.9%, in both sexes equally, while neurological onset was associated in 56.09%, predominating in men (73.09%). Patients with hepatic presentation are diagnosed at younger ages (17.67 years ± 9.07), while those with neuro-psychiatric type are diagnosed at older ages (27.39 years ± 7.81) and with longer diagnosis delays. After examination, liver disease was diagnosed in 52.17% of those with neurological onset; and in those with hepatic onset, neurological lesions were detected in 16.7%. In 58.82%, the liver phenotype was represented by liver cirrhosis (decompensated – 70%). The most frequent neurological manifestations were postural instability – 43.47%, pseudo-bulbar syndrome (dysphagia, dysarthria) - 35%, and tremors of the limbs - 30%. The psychiatric presentation includes depression - 47%, sleep disturbance - 25%, and mood changes - 17%. The Kayser-Fleischer ring was identified in 32%, of which 75% was associated with neurological lesions. Splenomegaly was identified in 58.54%, of which 79.17% were associated with hepatomegaly. One patient underwent a liver transplant due to acute liver failure. Genetic testing was performed in 92%, and most of them were compound heterozygotes. The most common mutation was p.H1069Q (69.57%).

Conclusion. Our study observed that hepatic presentation was diagnosed at younger ages, while neuropsychiatric manifestations were identified at older ages and with longer diagnostic delays. Also, the late establishment of the diagnosis was associated with various complications and irreversible organic damage.