

## **Clinical manifestations of Wilson's disease-other organs**

### **K. Dzieżyc**

*2nd Department of Neurology, Institute of Psychiatry and Neurology, Poland*

Wilson's disease (WD) presents mainly with hepatic and neuropsychiatric features. However, copper accumulates not only in the liver and brain, but also in other organs. The clinical manifestation of WD involves ophthalmological, renal, cardiac, skin, osteoarticular, or endocrinologic disturbances. The most typical ophthalmological sign is Kayser-Fleischer ring as a result of copper accumulation in the cornea. Sunflower cataract is rare but also characteristic sign. Degeneration of the retina observed in WD patients as a marker of neurodegeneration and correlate with degree of impairment of the nervous system. Cardiac injury may include arrhythmia, cardiomyopathy, and autonomic dysfunction. Electrographic abnormalities detected in WD patients include left ventricular atrophy, biventricular hypertrophy, early depolarization. In most patients cardiac disturbances are mild. Renal abnormalities include tubular dysfunction and nephrolithiasis. Bone demineralization is a common manifestation in patients with WD. Endocrine system manifestations, such as infertility or repeated miscarriages, growth and puberty disturbances, hypothyroidism, and hypoparathyroidism, are also observed. Although increased risk of spontaneous abortion in well treated WD patients it is possible to become pregnant. Other clinical aspects of WD include pancreas involvement, immunologic disturbances, presence of lipomas, and skin changes. Awareness of other possible WD manifestations is important in the differential diagnosis of WD.