

## **Is PD more common in patients with ET? (Con)**

### **D. Kozirowski**

*Department of Neurology, Medical University of Warsaw, Poland*

Essential tremor (ET) is one of the most common diseases in the world. Parkinson's disease (PD) is the second most common neurodegenerative disease in the world. The prevalence of both diseases increases with age. There are no case-control studies, to my knowledge, that demonstrated the higher occurrence of PD in patients with ET. Neuropathologically, both diseases are completely different. PD is a typical neurodegenerative disorder with well-known pathology with synuclein inclusions. The neuropathology of ET is not strictly neurodegenerative and affects a different brain area (cerebellum) and has a different pathology (torpedo inclusions). Most PD cases are sporadic. The genetic basis of PD occurs in about 10% of patients. We have many genes, mutations that are responsible for the monogenic forms of PD. In many cases of ET family history is common, but there are no certain genes that would be associated with typical mendelian forms of the disease. Clinical manifestation includes completely different symptoms. Parkinson's disease is a complex syndrome and in some cases tremor does not occur at all. On the other hand, position and kinetic tremor are axial symptoms of ET. The coexistence of both diseases is high due to their prevalence. However, there is not enough epidemiological evidence to determine whether a prior diagnosis of PD was more prevalent in the ET cases. Neuropathology, genetics and symptomatology do not show the relationship between these disorders.