

## **Animal models are useful in understanding PD pathogenesis- pro**

### **B.O. Popescu**

*Department of Clinical Neurosciences, 'Carol Davila' University of Medicine and Pharmacy, Romania*

*Laboratory of Molecular Biology, 'Victor Babes' National Institute of Pathology, Romania*

*Department of Neurology, Colentina Clinical Hospital, Romania*

Parkinson's disease (PD) is the second most frequent neurodegenerative disease, characterized by slow spread of alpha-synuclein pathology over decades and a multitude of motor and non-motor clinical signs. As in other neurodegenerative disorders, data from experimental studies in classical animal models for PD did not translate in similar results in PD patients. One of the main limitations of the PD models is targeting solely dopaminergic neurons, therefore not being able to reproduce the complex pathological aspects of PD, including non-motor degeneration. However, from each such model, valid pieces of information can be integrated in our understanding of PD pathogenesis. Moreover, current development of new animal models, such as alpha-synuclein expressing models, seems to be much closer to PD pathological scenario as compared to classical lesion-based models, and will probably add more valuable information in future.