

Dr. Caroline Thun-Hohenstein
Dr. Dieter Volc
Neurology Specialists

Private Clinic Confraternitaet Skodagasse 32, 1080 Vienna +43 (0)1 5221309

praxis@volc.at

## Parkinson's and dementia

In a large study ("Express", an acronym for EXelon in PaRkinson's disEaSe dementia Study) of nearly 600 patients with Parkinson's dementia, the frequency of this psychiatric complication in motor disease was found to be 40%. The symptoms of Parkinson's dementia include attention disorders, depression, anxiety, listlessness and hallucinations. However, logical thinking remains largely intact. The onset of dementia is often not recognised in time and treatment is therefore not initiated or initiated late. Forgetfulness, states of confusion and personality changes are seen as harbingers of this complication.

During the 24-week study, patients received daily 3 to 12 mg of the Cholinesterase inhibitors **rivastigmine** or placebo. After the 6 months, the patients showed an average improvement in ADAS-cog by 2.1 points and a decrease of 0.7 in the placebo arm, the ADCS-CGIC was 3.8 on rivastigmine and 4.3 on placebo, both results are statistically significant improvements in the therapy arm. Applied to daily life, this represents an advantage of approximately one year over natural progression. The earlier the treatment starts, the better the outcome of the symptom delay. Since the side effect rate is low, the use of this new therapeutic option is recommended.

Therapy with cholinesterase inhibitors in patients with Parkinson's dementia also has a beneficial effect on the control of psychotic symptoms and can avoid treatment with neuroleptics if insight is gained and behavioural disorders are absent. For psychotic symptoms, however, the use of atypical neuroleptics is required, whereby at present only clozapine (cave agranulocytosis, blood count controls!) and quetiapine can be regarded as first choice therapeutics, all other also atypical neuroleptics worsen the extrapyramidal symptoms and thus the mobility.

However, aging in all of us is accompanied by a decrease in memory performance and executive functions. This not only concerns the Parkinson's patients themselves, but also their relatives, especially partners and siblings, who are usually of the same age. Although age-associated memory impairment (AAMI) is regarded as part of the normal ageing process and progresses only slowly, its effects on memory function can be worrying. Research has shown that memory performance decreases by up to 50% between the ages of 30 and 70. Studies have shown that the ability to remember names, for example, decreases by more than half during this period.

Several studies with **cerebrolysin infusions** showed a good and measurable effect in the test persons. The highest response rates were found in the category memory with 70%, followed by general well-being with 60%, ability to concentrate with 45% and learning ability with 30%.

None of the study participants complained about side effects during the study.

In preclinical studies, the following mechanisms of effect could be demonstrated for cerebrolysin: Neuronal sprouting and axonal networking, differentiation of neuronal stem cells, modulation of neurotransmitter deficits, induction of neuronal repair processes, antiapoptotic effect. In clinical studies cerebrolysin shows a significant improvement of cognitive performance and global clinical impression. Furthermore, a significant improvement of neuropsychiatric symptoms was described for the 60ml dose. A four-week application two to three times per year is recommended.

## **BIBLIOGRAPHY**

- 1 Emre M et al. Rivastigmine for the dementia associated with Parkinson's Disease. N Engl J Med 2004;351:29-38.
- 2 Consensus Statement der Österreichischen Gesellschaft für Neuropsychopharmakoplogie und Biologische Psychiatrie, O.Univ.-Prof. Dr.h.c.mult. Dr.med. Siegfried Kasper, PD Dr. Michael Rainer, 2015 NeuroPsy