

Parkinson's and depression

Behind the generally known movement disorder symptoms of Parkinson's disease, another complaint is often not taken seriously enough: depression. However, as many as 40% of all Parkinson's patients have additional depression complaints. The onset of the disease is often not characterized by a movement disorder, but by a stage of listlessness, exhaustion and fatigue. Dr. Dieter Volc still remembers his first tentative steps in neurology when he repeatedly mistook an inhibited depression as an onset to Parkinson's disease and suspected an akinetic Parkinson's disease when there was a severe depression. But with time and a good teacher one will soon see the differences.

NEUROTRANSMITTERS IN THE BRAIN

The connection between movement disorder and low mood is certainly given. Dopamine, the carrier substance in the brain that can be produced too little in Parkinson's patients, not only has an important function in controlling mobility, but is also the key to drive and motivation, plays a role in the appetite system and in controlling sexual appetite and mood as well.

But not only the production of the messenger substance dopamine is reduced, Parkinson's disease also affects the other messenger substances, serotonin, responsible for relaxation and regeneration, as well as noradrenaline, which arouses interest and delivers psychic energies.

So much on the biological background. But to be diagnosed with Parkinson's disease is also a drastic experience, its significance for the affected person is comparable to the diagnosis of cancer and reveals many anxieties such as the fear of physical disability, dependence on others, loss of social contacts, partner, job.

ANHEDONISM

The tendency towards generalization should not be pursued, but at a high percentage one finds the following profile as a typical „premorbid personality of the Parkinson's patient“.

Later Parkinson's patients are less talkative and flexible in their earlier lives, but more generous, calm, cautious, overcontrolled and depressed. These characteristics are at least partially associated with subclinical cerebral damage.

Compared to the „normal population“, Parkinson's patients are more performance-oriented and introverted, more inhibited, suffering more from somatic complaints and more emotionally unstable. They suffer more from depressivity and bad health. With regard to the characteristic „social orientation“ there is a tendency to stubbornness and rigidity in goal orientation.

The search for something new is not well pronounced, nor is the ability to enjoy. (We are of the opinion that the „protective“ power of nicotine, caffeine and alcohol, which is repeatedly brought into play with Parkinson's, is not only a substance effect, but has to do with the anhedonistic pre-morbid personality. Rarely do you find Parkinson's patients who have led an enjoyable life, they were mostly diligent, successful and introverted). Dopamine is the central neurotransmitter for all these symptoms!

DEPRESSION

The increased depressivity of Parkinson's patients alone need not be a characteristic of the underlying disease, as other chronic conditions are also accompanied by depression. However, it is noticeable that in twin studies both groups of twins (single and double) achieved on average significantly higher depression values than the control subjects. This correlates the observation that relatives of Parkinson's patients are more often depressed.

If you inquire a few specific criteria or ask yourself the questions you find in the table, you can easily come to a conclusion. Some of the symptoms almost always occur in Parkinson's disease (fatigue, sleep disturbance, weight loss), others are typical indications of depression (feelings of guilt, high basic pessimism, increased anxiety). The depression, typical of Parkinson's patients, is usually not as severe as depression as a stand-alone psychiatric disease with and without manic stages, but slight depressive moods and depressive episodes are quite often present in a form that makes treatment appear meaningful.

THERAPY OPTIONS

The treatment of „merely“ depressive persons is already difficult, since the widespread misconception prevails that „pulling oneself together“ or „taking a vacation“ would be sufficient. But it doesn't work that way. It lacks strength and drive to pull oneself together and on your vacation, the depression rides along. Further above we have shown that, as with Parkinson's disease, there is also a lack of neurotransmitters in depression, which, fortunately for those affected, can be chemically balanced. And just as one cannot get rid of movement disorders with mental training alone, but needs chemical control from the outside, it is also necessary to restore the chemical inner balance in depression. It is crucial to recognise depression as a treatable syndrome and not to dismiss it as an inevitable side effect of Parkinson's disease. The new antidepressants are well tolerated and their use is justified if there is only a slight suspicion of depression. The onset of the effect is noticeable after only a few days. There is no dependency, this side effect belongs rather to the tranquilizers, also no lasting personality change is caused and all the fears „of psychotropic drugs“ are in most cases irrational. It is always surprising how some patients like to take drugs that have very unfavorable effects on Parkinson's, that also affect the brain, but are not easily recognized as psychotropic drugs by the layman. These include drugs for dizziness, stomach problems and sleep disorders. And the most adorable excuse we keep hearing is that they are „only herbal remedies“. Most of the time we mention in response the bulb leaf fungus and the consequences of its ingestion - purely vegetable.

The treatment of depression in Parkinson's is not fundamentally different from normal therapy with antidepressants. The two principles of optimal control of motor symptoms and the use of psychotropic drugs with a favourable safety profile must be observed. Surprisingly, there are no studies with a large number of cases on the subject, but the study data allow the results in depressive patients without Parkinson's disease to be transferred to our target group.

The selection of an antidepressant is based on the criteria of good efficacy and low side effects. Low blood pressure is a prominent symptom of Parkinson's as well as a side effect of tricyclic antidepressants (TCA). This group of substances has unquestionable value as a sleep-regulating medication, although the risk is higher for it to trigger a psychotic episode and confusion, a problem that also exists with Anti-Parkinson drugs. Especially motryptiline in low doses is used here.

The “modern” antidepressants from the SSRI group (selective serotonin reuptake inhibitors) have a more favourable side effect profile. They also increase drive and rarely cause nausea and hyperexcitement. Individual studies prove the efficacy of escitalopram with a good side effect profile, venlafaxine and paroxetine can also be used.

Not only the effect of serotonin, but also of noradrenalin is achieved by the use of SNRI (serotonin-noradrenalin-reuptake inhibitor). And with this all involved transmitter systems are accessible! SNRI do not cause any dangerous side effects and are also safe to use in Parkinson's patients. A special advantage of SNRI could be the noradrenergic effect as protection against blood pressure drop (Orthostasis. At least 30 mm Hg less upon standing for 1 minute compared to the initial value when lying). They rarely lead to fatigue, which can be an advantage in

Parkinson's disease and when using tiring Anti-Parkinson's drugs.

Modern non-ergoline dopamine agonists occupy a special position. They are the cornerstones of symptomatic Parkinson's therapy and also have antidepressant properties. In a comparative study, Pramipexol performed just as well in major depression, i.e. depression without Parkinson's or Restless Legs Syndrome, as the reference substances fluoxetine and sertraline and, of course, far better than placebo. The use of this drug can therefore be effective for the symptomatic therapy of motor disorders, for neuroprotection and for the treatment of depression. This is an advantage for elderly people who have mostly undergone polytherapy. (Figure 1 and 2)

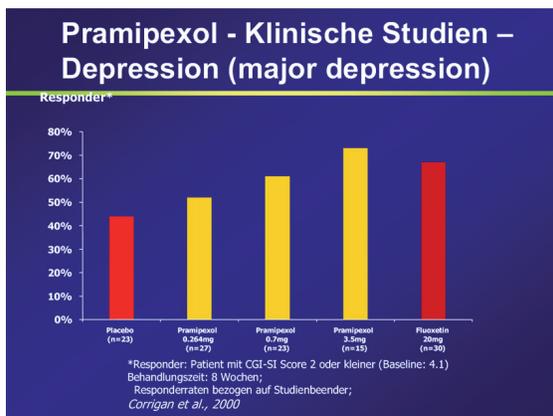


Figure 1

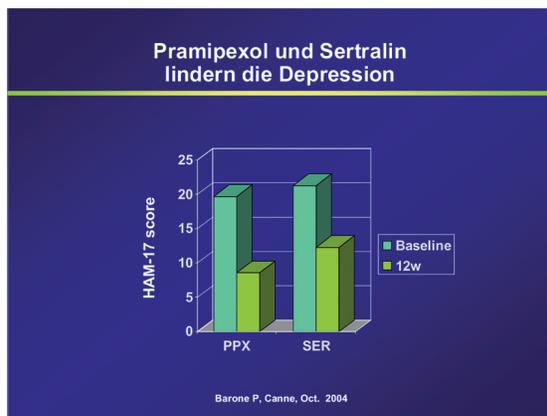


Figure 2