Cannabinoids - also help with ALS with spastic symptoms.

Caught in one's own body - scarcely any other illness is as feared as ALS. Currently, up to three out of every 100,000 people suffer from it each year, but so far there is no therapy that effectively prevents the progression of the disease. All the more important are accompanying therapies, which are adapted to the individual course of the disease. A possible, although not very common symptom of ALS is a muscular spasticity that can not only be painful, but also affects movements, especially walking. The treatment of spasticity can therefore improve the quality of life significantly but is not easy.

Amyotrophic lateral sclerosis (ALS) is a progressive disease (degeneration) of the motor nervous system, or more precisely of the motor nerves (so-called first and second motor neuron). The prevalence in Germany is about 3-8 out of 100,000 people, the incidence (new disease rate) is 0.5-3 per 100,000 annually. The onset of illness is usually after the age of 50 (50 to 70 years). The survival time is on average 3-6 years; However, it can also be 10-20 years (in about 5-10%). At first the patients often notice disturbances of the fine motor skills of the hands, in the course of which the motor dysfunctions spread, then also the legs are affected, but also the speaking, chewing, swallowing as well as the respiratory musculature.

"The course of ALS is very variable, and the range of symptoms is relatively wide, depending on whether the first or second motor neuron is more affected," explains Professor em. Dr. Volker Dietz, FRCP, Zurich. Overall, the second motor neuron is affected more often, it comes to muscle atrophy (atrophy) with muscle weakness and flaccid paralysis. In case of predominant involvement of the first motor neuron, on the other hand, muscular spasticity with increased muscle tension and muscle stiffness occurs, as well as spasmodic pain. Spasticity not only disturbs the fine motor skills, but also the walking ability, which leads to falls and increasing disability. The treatment of spasticity can therefore significantly improve the quality of life of the affected ALS patients. "The treatment of spastic symptoms in ALS is not easy, the therapy consists in the combination of various measures, these include primarily physiotherapy in mobile and their combination with drugs in immobile patients," explains Prof. Dietz. The available anti-spastic substances can relax the spastic muscles and thus improve the mobility, but they also come with side effects such as increased fatigue. "In addition, muscle relaxant medications often cause unwanted muscle weakness, which can increase paralysis with concomitant muscle atrophy."

Treatment should always be multimodal. For the treatment of spasticity in the context of multiple sclerosis a cannabis combination preparation (Nabiximols) is approved as an additive therapy. Nabiximols contains tetrahydrocannabinol (THC) and cannabidiol (CBD) in standardized amounts (2.7 mg THC and 2.5 mg CBD per 100 µL - equivalent to one spray) and is rapidly absorbed through the buccal mucosa. It therefore seems logical to evaluate this treatment option in ALS as well - this was the goal of the recently published "Lancet Neurology" CANALS study ("Cannabinoids in ALS").

The randomized, double-blind, placebo-controlled Phase II study initiated by the "Italian Research Foundation for ALS" at the University of Milan was conducted at four Italian centers. The study randomized 60 adult patients with amyotrophic lateral sclerosis (ALS) who had had spasticity (at least two muscle groups with a score of ≥1 on the modified Ashworth scale) for at least three months and had received definite antispastic therapy for at least 30 days. Patients were randomized 1: 1 on a computerized basis and either nabiximoles or placebo for six weeks. For the first 14 days, patients dosed or boosted the spray according to a given regimen (maximum 12 shots in 24 hours); Thereafter, the dose remained constant for four weeks. The primary endpoint was the change in the modified Ashworth score within the six weeks.

29 patients from the nabiximols group and 30 from the placebo group were evaluated. The modified Ashworth score improved significantly in the nabiximoles group by an average of

0.11; in the placebo group, however, it declined by an average of 0.16 (p = 0.013). There were no treatment discontinuations during the six weeks of study, Nabiximols was well tolerated, side effects did not occur.

"In many medical areas that are associated with painful muscle spasms, cannabinoids are now a Alternative, if conventional therapies do not respond or do not respond adequately ", comments Prof. Dietz. The DGN therefore agrees with the authors of this "proof-of-concept" study that now larger phase III clinical trials should follow, so that future cannabinoid therapy may be legally available for ALS.

Source: German Society of Neurology (DGN)

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