



Therapy

New treatment for Parkinson's disease

A research group from the Public Health System of Andalusia (SAS) and Málaga University has developed a new treatment with neuroprotection effect for patients with Parkinson disease.



Description

Parkinson's disease is an alteration of the voluntary movement of the muscles. This disease is believed to be caused by a degeneration of presynaptic dopaminergic neurons in the brain, and thus the absence of adequate release of the chemical transmitter dopamine during neuronal activity. Currently, the most widely used treatment for Parkinson's disease is the administration of L-DOPA, but patients often suffer from serious side-effects, even when it is given with a peripheral dopa-decarboxylase inhibitor such as carbidopa or benzaseride which, although they limit peripheral side effects, do not completely eliminate them, and also do not stop disease progression. Another alternative form of therapy is to administer postsynaptic dopamine agonists, such as bromocriptine, however this approach is also associated with nervous system side effects. In view of the foregoing, it is clear that there is a continuing need for the provision of safe medications for the treatment of Parkinson's disease and associated parkinsonism disorders.

The present invention refers to the administration of a growth factor that, in low doses in an experimental model of Parkinson's disease in mice, demonstrates a clinical improvement, neuroprotective and antioxidant effects, and specifically to its use in the manufacture of drugs. or pharmaceutical compositions with a neuroprotective effect. This new treatment increases the expression of antioxidant enzymes, decreases oxidative cell damage and restores mitochondrial function and morphology, restoring neuronal function. On the other hand, the use of selective agonists of the receptor of this growth factor develops the same effects as the administration of the growth factor studied.

- https://www.ibima.eu/grupo_investigacion/neuroinmunologia-y-neuroinflamacion/
- https://www.ibima.eu/grupo_investigacion/aspectos-basicos-aplicados-enfermedades/
- https://www.ibima.eu/grupo_investigacion/endocrinologia-nutricion-diabetes-obesidad/



Advantages

- This treatment decreases oxidative cell damage in a Parkinson's model, improves mitochondrial morphology and function, and decreases neurodegeneration and symptomatology.
- First description of the neuroprotective effect of this growth factor receptors..



Intellectual Property

This technology is protected by a national patent application with priority date 04/28/2021, with possibility of international extension (PCT).



Aims

The researcher is looking for partnership and/or license agreement.



Classification

Area: Therapy
Technology: Biotechnology
Pathology: Parkinson's disease