Use of sylimarin as neuroprotectant agent for the treatment of Parkinson's disease

Natural products

Description

This technology involves the use of silymarin for liver diseases and as a neuroprotectant in the handling of Parkinson's disease. Trials show that the use of silymarin helps preserving the levels of dopamine up to 69%; decreased apoptosis and prevents the death of dopaminergic neurons in the midbrain.

Application

The treatment of Parkinson's disease is primarily based on the substitution of dopamine levels. In the model of the disease induced by the neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP), ingestion of MPTP leads to the destruction of neurons in the *substantia nigra* of the brain, so the symptoms are very similar to those seen in Parkinson's disease. When silymarin is administered, dopamine levels remain constant; the death of dopaminergic neurons in the midbrain decreases and dopaminergic neurons are preserved.

The advantages of the invention are:

- ✓ It shows promising results for the treatment of hepatic pathologies.
- ✓ No drug reactions have been reported in humans
- ✓ No drug reactions have been reported in control animals
- ✓ It shows a positive neuro-protective effect in a model of Parkinson's disease

Stage of development

Synthesis of silymarin at laboratory scale.

IP status

Patent application No. MX/a/2012/009682.

Inventor

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Market potential

Parkinson disease incidence is increasing in developed and developing countries. It is estimated that 10 million people have been diagnosed globally, and that the disease affects one and a half more times to men than women.

Transferring conditions

- ✓ Technological development agreement (optional).
- ✓ Licensing (includes front payment and royalties)
- ✓

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