**Description**

**A COMPOSITION FOR THE TREATMENT OF PARKINSON’S DISEASE**

**Technical Field**

The invention relates to a composition formed for the use of methylsalidroside and colforsin derivatives in the treatment of Parkinson’s disease.

**State of the Art**

Parkinson’s disease is a nervous system disease associated with the degeneration of the substantia grisea nuclei in the lower parts of the brain. The treatments for this disease may be planned in three groups:

The first is the protection of the patient from being introverted and being isolated from the society, by means of useful activities and mental activities.

The second is the surgical treatment, which is employed to reduce the suffering of the patient and consists of the destruction of the diseased region with electricity or alcohol. The shaking usually improves following the surgical treatment, but no visible improvement occurs in the rigidity and the motions.

The third treatment, which is today considered to be the primary treatment for Parkinson’s disease, is the drug treatment. In the brain, there is a certain balance between acetylcholine, which increases the ability of the nerve cells to be stimulated, and dopamine, which performs the action opposite to that of acetylcholine. In the case of Parkinson’s disease, this balance has been disturbed in favor of acetylcholine and the dopamine deficit should be replaced. The synthetic dopamine is not able to cross the barrier between the blood and the brain. This problem was solved upon the discovery of L-Dopa, which converts into dopamine after crossing the blood-brain barrier. For the treatment, L-Dopa is administered at doses gradually increased until the dose at which the symptoms disappear. In addition, amantadine, an anti-viral drug, and bromocriptine, with similar action to dopamine, may be added to the treatment in order to support L-Dopa. The studies on the brain tissue transplantation are also currently in progress. The basis of this approach is not the transplantation of the brain, and it involves the transplantation of a small portion producing dopamine from a fetus that has just died to the patient’s brain.

The treatments according to the state of the art employed for the treatment of Parkinson’s disease involve the use of l-dopa or dopamine receptor agonists. The use of synthetic L-dopa leads to neurotoxic effect and loses functionality in the medium term. Also, the dopamine receptor agonists become inactive when the receptors develop tolerance.

As a result, the presence of the need for a composition formed for the use of methylsalidroside and colforsin derivatives in the treatment of Parkinson’s disease and the inadequacy of the existing solutions have made it necessary to perform an improvement in the relevant art.

**Object of the invention**

In order to eliminate the disadvantages of the state of the art, an object of the invention is to provide stimulation in substantia nigra.

Another object of the invention is to trigger the release of dopamine and also preserve the dopaminergic receptor sensitivity.

Another object of the invention is to provide an effective pro-dopaminergic action.

Another object of the invention is to stimulate the adenasyl cyclase enzyme to increase the cAMP level.

Another object of the invention is to provide a neurotrophic effect owing to the elevation provided by colforsin in the level of cAMP.

Another object of the invention is to stimulate the renewal of the nerve cells in substantia nigra.

Still another object of the invention is to increase the expression of NGF (nerve growth factor).

Still another object of the invention is to support the axone function.

Still another object of the invention is to accelerate and promote the dendrite formation.

Still another object of the invention is to provide an effective therapeutic characteristic both for the symptoms caused by Parkinson’s disease and for the cause of the disease itself.

In order to achieve the aforesaid advantages, the invention is a composition for treating Parkinson’s disease, said composition being obtained by the components selected from the group comprising methylsalidroside, colforsin 1,9 acetate that are used individually or in combinations.

The structural and characteristic features and all the advantages of the invention will become more clearly understood from the detailed description provided below and therefore, the evaluation must be made taking this detailed description into consideration.

**Detailed Description of the Invention**

The invention is a composition formed for the use of methylsalidroside and colforsin derivatives in the treatment of Parkinson’s disease. Methylsalidroside, one of the ingredients of the composition according to the invention, is a glucoside derivative naturally contained in trace amount by the plant rhodiola rosea. This ingredient, with the capability of providing stimulation in Substantia Nigra, both triggers the release of dopamine and preserves the dopaminergic receptor sensitivity. This ingredient, which also suppresses the conversion of dopamine to adrenaline, thus provides an effective pro-dopaminergic action.

Colforsin is a labdane diterpene naturally contained by the plants belonging to the family Coleus. It stimulates the adenasyl cyclase enzyme to increase the cAMP level. Colforsin also provides a neurotrophic effect owing to the elevation it provides in the level of cAMP.

Colforsin, another ingredient of the invention, stimulates the renewal of the nerve cells in substantia nigra. Colforsin increases the expression of NGF (nerve growth factor). Colforsin also supports the axone function. Colforsin accelerates and promotes the dendrite formation.

The two ingredients exhibit a synergistic action together and provide an effective therapeutic characteristic both for the symptoms caused by Parkinson’s disease and for the cause of the disease itself.

The composition according to the invention contains methylsalidroside, colforsin 1,9 acetate.

Said formulation is obtained by a mixture of the aforesaid components according to the following ratios by weight:

99-1% methylsalidroside,

1-99% colforsin 1,9 acetate.

The composition is obtained from the aforesaid components selected from the aforesaid group and used according to the mentioned weight ratio ranges individually or in combinations.

Said invention also encompasses the use of said composition for treating Parkinson’s disease and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for treating Parkinson’s disease, said composition being obtained by the components selected from the group comprising methylsalidroside, colforsin 1,9 acetate that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 99-1% by weight methylsalidroside.
3. A composition according to Claim 1 characterized in that it comprises 1-99% by weight colforsin 1,9 acetate.
4. Use of the components according to Claims 1 to 3 obtained individually or in combinations from the group consisting of methylsalidroside, colforsin 1,9 acetate for the manufacture of a composition for treating Parkinson’s disease.

**ABSTRACT**

**A COMPOSITION FOR THE TREATMENT OF PARKINSON’S DISEASE**

The invention relates to a composition formed for the treatment of Parkinson’s disease.

No figure.