MELANIN FUNCTION AND MOVEMENT DISORDER

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Movement disorders are a major problem, because its pathophysiology is not completely understood. A structure that often has changes is the substantia nigra of the midbrain, but had not been able to explain its relation to neurodegenerative diseases. Our finding of the intrinsic property of melanin to transform light energy into chemical energy free through the dissociation of the water molecule, we infer that the main function of neuromelanin is to produce energy. Therefore, when decreasing the amount of melanin in the midbrain, the chemical energy available free shrinkage, which leads to the impairment of function of the adjacent structures.

Resulting in various abnormalities of the important functions in the midbrain involved. Our therapeutic results in patients with diseases in which described the decrease in the amount of neuromelanin, such as AD, PD, Huntington also other movement disorders have been formidable.

Conclusion: The modulation of the dissociation of the water molecule through medication, offers new possibilities in the treatment of various neurological diseases, in which one of the main features is the decrease of neuromelanin in the substantia nigra.