



PARKINSON'S DISEASE NEWS

<http://www.viartis.net/parkinsons.disease/news.htm>

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CIRCADIAN RHYTHMS IN PARKINSONS' DISEASE

JAMA Neurology [2014] 71 (4) : 463-469 (A.Videnovic, C.Noble, K.J.Reid, J.Peng, F.W. Turek, A.Marconi, A.W.Rademaker, T.Simuni, C.Zadikoff, P.C.Zee)

Complete abstract : <http://www.ncbi.nlm.nih.gov/pubmed/24566763>

People with Parkinson's Disease have been found to have blunted circadian rhythms. Circadian rhythms are the alterations of endocrine functions that take place in a regulated manner over a roughly 24 hour period. The pineal gland produces melatonin, which is a hormone that regulates the circadian rhythms. For more information go to :

http://www.nigms.nih.gov/Education/Pages/Factsheet_CircadianRhythms.aspx



The differences and the range of secretion of melatonin from the pineal gland were found to be lower in Parkinson's Disease than in people that do not have Parkinson's Disease. Overall Parkinson's Disease symptoms and duration of symptoms were not significantly related to the circadian rhythm. So it was only daytime sleepiness and not Parkinson's Disease symptoms generally that are affected by the blunted circadian rhythm that can occur in Parkinson's Disease.

Dopamine regulates melatonin secretion. Therefore, the reduced dopamine that occurs in Parkinson's Disease will lead to an altered circadian rhythm.

Circadian dysfunction can consequently underlie excessive sleepiness in Parkinson's Disease. Approaches aimed to strengthen circadian function, such as timed exposure to bright light and exercise, might therefore serve as complementary therapies for the nonmotor manifestations of Parkinson's Disease.

<http://www.viartis.net/parkinsons.disease/news/140621.pdf>

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