# Idiopathic Restless Legs Syndrome in Parkinson's Disease - A Risk Factor or a Chance Association? Case report 

Magdalena Boczarska-Jedynak, ${ }^{1}$ Małgorzata Sałata, ${ }^{2}$ Barbara Jasińska-Myga, ${ }^{1}$ Grzegorz Opala ${ }^{1}$

${ }^{1}$ Department of Neurology, Aging, Degenerative and Cerebrovascular Diseases, Central University Hospital, Katowice, Poland
${ }^{2}$ Students' Scientific Organization at the Department of Neurology, Aging, Degenerative and Cerebrovascular Diseases, Central University Hospital, Katowice, Poland

## Objectives

Restless Legs Syndrome (RLS) is a chronic disorder caused by a dysfunction of dopaminergic transmission in subcortical areas. It is supposed that there is a relationship between RLS and Parkinson's disease (PD) as both conditions respond favourably to dopaminergic therapy.. There is still no evidence that early onset RLS predisposes to PD. RLS is a common disorder affecting from 5 to $15 \%$ of the general population and about 15 to $20 \%$ of PD patients. The aim of this study is to present five case reports of patients who have suffered from idiopathic RLS since childhood or young adulthood and who later presented with PD symptoms.

## Case report:

One woman and 4 men aged between 44 and -79 yrs (mean, 61.8) have suffered from RLS symptoms since the age of between 6 and 63 yrs (mean, 38.8). Parkinsonian symptoms appeared after 3 to 44 years and finally PD was diagnosed. In three cases there was a positive family history of RLS. Iron levels varied from 90126 (mean 106.3) $\mu \mathrm{g} / \mathrm{dL}$.

No significant changes were seen in any of the patients on brain MRI. All patients had received I-dopa in doses between 100 and $1200 \mathrm{mg} / 24 \mathrm{~h}$ (mean $-570 \mathrm{mg} /$ day), three were treated with I-dopa combined with dopamine agonists (ropinirole 0.25$1 \mathrm{mg} / \mathrm{day})$.

## Discussion:

RLS may predict the onset of PD. However, taking into account the high frequency of RLS in the general population it may be only a coincidence. It is therefore still not possible for RLS to be considered a predictor of idiopathic PD. Further investigations are needed.

