RESTLESS LEGS SYNDROME IN EARLY AND ADVANCED PARKINSON’S DISEASE: A PROSPECTIVE OBSERVATIONAL ANALYSIS AND CORRELATION WITH OTHER NON MOTOR FEATURES.

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BACKGROUND:

• In the general population RLS has a frequency of 8-10%.
• Previous uncontrolled studies have shown a significantly higher prevalence of RLS in PD patients.
• Little is known about RLS in PD, in particular severity and relationship with non motor symptoms (NMS) such as excessive daytime sleepiness, fatigue and insomnia.

METHODS:

• A retrospective clinical study of PD patients (untreated – stage 5 HY).
• RLS was diagnosed using the PD non motor symptoms scale (NMSS) sleep subsection questions and confirmed by International Restless Legs Study Group (IRLSSG) criteria and graded as mild (0-4), moderate (5-8) and severe (9-12), grading as used in NMSS validated for use in PD.
• Analysis was conducted using multivariant logistic regression and univariant regression analysis where applicable.
• Patients with moderate-severe RLS were included.

RESULTS:

• 329 PD patients were assessed using the NMSS.
• RLS (moderate-severe) was present in 24%, including untreated PD (n= 2).
• RLS was significantly associated with:
  - Severity of fatigue (β: 0.18, 95% CI [0.08-0.29], p= 0.001)
  - Insomnia (β: 0.11, 95% CI [0.02-0.21], p= 0.022)
  - NMSS sleep domain score (OR: 1.14, 95% CI [1.05-1.24], p= 0.002)
• No significance with:
  - Excessive daytime sleepiness (β: 0.05, 95% CI [-0.07-0.17], p= 0.39)
  - Age (OR: 1.03, 95% CI [0.96-1.10], p= 0.462)
  - Disease duration (OR: 0.95, 95% CI [0.85-1.07], p= 0.398)
  - HY (OR: 0.90, 95% CI [0.41-2.00], p= 0.794)

CONCLUSIONS:

• In this uncontrolled study, the occurrence of moderate to severe RLS is seen in 24% of a clinical PD cohort spanning HY stages 1-5.
• This prevalence is consistent with published observations of RLS in PD in non-controlled studies in Caucasians.
• RLS in PD leads to poor sleep quality, largely through insomnia, although our study shows no correlation with excessive daytime sleepiness.
• RLS in PD is also associated with fatigue in PD which is known to be detrimental to quality of life in people with Parkinson’s.
• Further studies are required to determine pathophysiology, as most of these patients are already on levodopa/dopaminergic therapy, as shown in graph 1.

REFERENCES: