

Results: Of the n=170 subjects, there were n=39 isolated RBD, n=81 RBD+, n=45 Early Symptomatic, and n=4 Phenoconverted. Isolated RBD subjects have no other early neurodegeneration signs/symptoms, those with RBD+ have at least one other identifiable early/mild symptom. The early symptomatic group includes those with mild or subjective cognitive impairment, pure autonomic failure, or possible multiple systems atrophy. The Phenoconverted group consists of those with Dementia with Lewy Bodies, Dementia NOS, Parkinson's Disease, or Parkinson's NOS. The distribution of impairment across the 5 major domains (motor, cognitive, autonomic, sensory, and psychiatric) for each of the 4 groups will be described.

Conclusion: This interim analysis presents data on n=170 subjects. The target enrollment is n=360 across the 7 original sites plus 3 new sites. Future work will follow these subjects longitudinally to assess rates and predictors of phenoconversion.

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A POPULATION-BASED STUDY OF PHENOCONVERSION TO PARKINSONISM FROM REM SLEEP BEHAVIOR: A POPULATION-BASED STUDY IN THE CLSA

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Introduction: To date, studies have estimated the phenoconversion rate from sleep clinics, using polysomnography proven RBD. However, no population-based estimates have been reported, testing to what degree possible RBD, screened by questionnaire is associated with increased risk of neurodegeneration.

Methods: We included those aged 45–85 years, living in one of 10 Canadian provinces in between 2012–2015 (at the baseline), recruited via three population-based sampling methods. Dream enactment behavior/possible RBD was screened using the RBD1Q single question-questionnaire. De-novo parkinsonism was defined as free of pre-existing diagnosis at the baseline with a 'new' diagnosis at the follow-up (205–2019). Relative risk (log-binomial regression), hazard ratio (Cox regression), incidence rate (Poisson regression) between the affected group and the symptom naïve group were assessed, adjusting for age and sex (and total years of education and language).

Results: Overall, 58 participants phenoconverted into parkinsonism and 53 into dementia at the follow-up (mean intervals=3.06±0.37 years). Participants with dream enactment behavior had 2.75 times higher risk to phenoconvert into parkinsonism than the symptom-free. Similarly, those with dream enactment behavior at the baseline possessed higher risk to screening positive of parkinsonism. No difference in time to phenoconversion was found between groups, The results remained robust after excluding non-RBD related symptoms, such as apnea and non-REM sleep parasomnia.

Conclusion: Compared to symptom-free, those with pRBD had higher risk to developing parkinsonism in near future.

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CHARACTERISTICS OF AUGMENTED RLS PATIENTS ON DOPAMINE AGONISTS AT A TERTIARY REFERRAL CENTER: WHERE DO WE GO FROM HERE?

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Introduction: Augmentation is a management dilemma in RLS patients on dopaminergic therapy. Understanding the clinical characteristics of such patients may assist in better management strategies.

Methods: Consecutive new consultations for RLS from 4/2016-6/2020 were identified from a single tertiary referral center in Boston, USA. Patients were included in this analysis if they had augmentation and current treatment with a dopamine agonist. Clinical information from initial consultation was collected. RLS severity at time of consultation was determined retrospectively with a modified IRLSSG severity score (0–12), assessing RLS symptom frequency (0–4), duration (0–4), and severity (0–4).

Results: Out of 209 referrals with RLS, 105 patients had augmentation, of whom 88 were on dopamine agonists at initial evaluation. Average age was 67 years (SD 11 years, range 39–88); 62 were female (59%). Mean duration of RLS symptoms was 27 years (SD 20), and 91% had symptoms > 10 years. Mean duration of dopamine agonist therapy was 11 years; 72% had previously been treated with pramipexole, 65% with ropinirole, 73% with rotigotine, and 16% with levodopa; 72% of patients had been treated with alpha-2-delta ligands, and 28% with opioids. Common comorbidities included obstructive sleep apnea (47%), obesity (49%), and depression (44%). Serotonergic medications were currently used by 25%. Of the 88 augmented patients on dopamine agonist therapy, 97% had earlier onset of symptoms and 33% had symptoms in both morning and afternoon; 53% reported anatomical extension. The mean modified IRLSSG score was 8.4 (SD 3.2). 66% of patients had either ferritin <75 mcg/L or transferrin saturation <20%. At the time of initial assessment, 49% were on pramipexole, 47% on rotigotine, 5% on rotigotine and 7% on levodopa: mean daily dopamine agonist dose was 1.23 mg (SD 1.20) of pramipexole equivalent. 37% were on alpha-2-delta ligands: mean daily dose 1014 mg (SD 830, median 700 mg) of gabapentin equivalent.

Conclusion: Higher than FDA-recommended dopamine agonist dosing and high prevalence of iron deficiency in patients with augmented RLS represent a treatment gap in the care of RLS patients in the community. Controlled studies of guideline-based therapy are indicated to determine optimal management of augmented RLS.

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PATIENT-REPORTED TREATMENT OUTCOMES IN THE MAYO CLINIC REM SLEEP BEHAVIOR DISORDER REGISTRY: EFFICACY OF MELATONIN AND CLONAZEPAM

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Introduction: REM sleep behavior disorder (RBD) is characterized by disruptive, violent dream enactment behaviors (DEB), necessitating symptomatic treatment to prevent injury and reduce DEB frequency and severity. Melatonin and clonazepam are regarded as RBD therapeutic mainstays, although outcomes data remains limited. We surveyed RBD patients to determine their outcomes following melatonin, clonazepam, and melatonin-clonazepam combination therapy.

Methods: Mayo Clinic RBD Patient Registry participants received an electronic survey concerning treatment type(s) and dose(s), efficacy, and adverse effects. The primary outcome was treatment efficacy, determined by comparing DEB frequency/severity ratings on a visual analog scale (VAS). Adverse effects severity was assessed by Likert