

Nighttime Agitation and Restless Legs Syndrome in People with Alzheimers Disease

<https://www.neurodegenerationresearch.eu/survey/nighttime-agitation-and-restless-legs-syndrome-in-people-with-alzheimers-disease/>

Principal Investigators

RICHARDS, KATHY CULPEPPER

Institution

GEORGE MASON UNIVERSITY

Contact information of lead PI Country

USA

Title of project or programme

Nighttime Agitation and Restless Legs Syndrome in People with Alzheimers Disease

Source of funding information

NIH (NIA)

Total sum awarded (Euro)

€ 3,446,770.64

Start date of award

15/09/2016

Total duration of award in years

1

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Acquired Cognitive Impairment... Aging... Alzheimer's Disease... Alzheimer's Disease including Alzheimer's Disease Related Dementias (AD/ADRD)... Behavioral and Social Science... Brain Disorders... Clinical Research... Clinical Research - Extramural... Clinical Trials and Supportive Activities... Dementia... Neurodegenerative... Neurosciences... Sleep Research... Translational Research

Research Abstract

Project Summary/Abstract. Nighttime agitation, defined as the appearance or exacerbation of behavioral disturbances, such as wandering and aggression, in the afternoon and/or evening, is a prevalent symptom in persons with Alzheimer's disease that reduces their quality of life and restricts their environments. Effective treatments are lacking. One major cause for past failure of treatments has been the approach of treating all nighttime agitation alike. Unlike interventions in the past, our precision medicine approach tailors the intervention to a specific sleep disorder, restless legs syndrome (RLS). RLS occurs in 10-14% of older adults and it is likely that persons with Alzheimer's disease have RLS, since it is quite common, but it is infrequently identified because diagnosis is dependent on patients answering complex questions about their symptoms. RLS causes an urge to move associated with uncomfortable and unpleasant leg sensations. The urge to move and leg discomfort only occur or worsen at night, and relief is by movement. We hypothesized that RLS might be an etiology for nighttime agitation because: 1) circadian patterns of nighttime agitation and RLS symptoms are almost identical; 2) unrelieved RLS discomfort may precipitate behaviors such as screaming and requests for help, and the urge to move may cause wandering, pacing, and restlessness; and 3) factors common in institutionalized persons with Alzheimer's disease, such as anemia, prolonged bed rest, and antidepressants, trigger or worsen RLS. Our preliminary work supports our hypothesis, and provides beginning evidence that RLS may be an unidentified etiology for nighttime agitation. In 59 persons with dementia and nighttime agitation, and RLS diagnosed using objective measures, we found that almost $\frac{1}{4}$ had RLS and that RLS was associated with nighttime agitation ($r = 0.31$, $p .01$). We now propose a pilot clinical trial to determine if RLS treatment reduces nighttime agitation, improves sleep, reduces antipsychotic medications, and the mechanism for these effects. We have chosen gabapentin enacarbil (GEN) as the treatment because it is FDA approved for RLS and has a favorable safety profile. We propose an 8-week, double-blind placebo-controlled randomized pilot trial of GEN versus placebo in 136 nursing home residents with moderate to severe Alzheimer's disease, nighttime agitation, and RLS, followed by an 8-week post-trial evaluation of antipsychotic medication use. The specific aims are to: 1) Determine the effect of GEN, compared to placebo on nighttime agitation (primary endpoint); 2) Describe the safety profile of GEN compared to placebo in this population; 3) Estimate the effect size of GEN compared to placebo on nighttime sleep, RLS behaviors, and antipsychotic medications; 4) Explore whether frequency of RLS behaviors mediates the effect of GEN on nighttime agitation behaviors. The results of this study and future definitive trials may shift and improve standards of care for treatment of nighttime agitation; reduce elopement, aggression, and other nighttime agitation behaviors; and improve sleep.

Lay Summary

Project Narrative. Nighttime agitation in persons with Alzheimer's disease causes patient suffering, distresses caregivers, and often results in prescriptions for harmful antipsychotics. Effective treatments are lacking because of our limited knowledge of the etiology of nighttime agitation. We propose a clinical trial to better elucidate whether a sleep disorder, restless legs

syndrome, may be a mechanism for nighttime agitation, and if treatment with gabapentin enacarbil (Horizant®) reduces nighttime agitation, improves sleep, reduces restless legs syndrome behaviors, and reduces antipsychotic medications.

Further information available at:

Types:

Investments > €500k

Member States:

United States of America

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A