Restless Genital Syndrome in Parkinson Disease

Camila C. Aquino, MD, MSc; Tiago Mestre, MD, MSc; Anthony E. Lang, MD, FRCP

**Observations**

A 65-year-old woman with PD experienced a disabling discomfort in her pelvis and genital region for 3 years. The episodes occurred in the evening and were triggered by sitting or lying down for a period. Gynecological investigation was unrevealing. She experienced improvement with a low dose of a dopamine agonist.

**Conclusion and Relevance**

Restless genital syndrome is a rare disorder that can be a source of distress and disability. In patients with PD, restless genital syndrome should be included in the differential diagnosis of genital symptoms and restlessness, along with nonmotor wearing off and akathisia. A detailed clinical history is essential for this diagnosis and treatment with dopamine agonists can provide benefit.

**Importance**

Symptoms in the genital region, such as pain, discomfort, tingling, and burning sensations, have rarely been reported in Parkinson disease (PD), and the previous cases were attributed to nonmotor off symptoms. We report a patient with PD and severe genital discomfort unrelated to motor fluctuations but compatible with restless genital syndrome.

**Report of a Case**

A 65-year-old woman presented to our clinic with PD since the age of 60 years, beginning with resting tremor in the left hand, gradually progressing to the left lower limb. She denied balance, cognitive, and autonomic disturbances. She had experienced discomfort in her pelvis and genital region for 3 years, reported as a sensation of “congestion,” itching, and “growing” of pelvic organs, suddenly spreading to her thighs resulting in a “jolt.” The episodes occurred daily, only during the evening and night, and were triggered by sitting or lying down for a period. Her sleep was markedly disrupted by the genital discomfort, which could only be relieved by physical activities, standing, or walking. There was no restlessness in the legs. She had been taking levodopa/carbidopa, 100/25 mg 3 times a day, with meals for approximately 3 years, with improvement of PD symptoms in the evening and response to pramipexole, compatible with RGS.

Our goal is to highlight the responsiveness of RGS to dopamine agonists (DAs) and to discuss the complexity of the differential diagnosis of genital symptoms in PD, which can be a source of misdiagnosis and inappropriate investigation and treatment. The patient provided written informed consent for this case report.

**Author Affiliations:** Edmond J. Safra Program in Parkinson's Disease, Morton and Gloria Shulman Movement Disorders Center, Toronto Western Hospital, Toronto, Ontario, Canada (Aquino, Mestre, Lang); Department of Neurology, Universidade Federal de São Paulo, São Paulo, Brazil (Aquino); Division of Neurology, Department of Medicine, University of Ottawa, Ottawa, Ontario, Canada (Mestre).

**Corresponding Author:** Anthony E. Lang, MD, FRCP, Edmond J. Safra Program in Parkinson's Disease, Morton and Gloria Shulman Movement Disorders Center, Toronto Western Hospital, 399 Bathurst St, McLaughlin Pavilion, 7th Floor, Toronto, ON M5T 2S8, Canada (lang@uhnresearch.ca).
Box. Previous Nomenclatures Applied to RGS

- Vulvodynia
- Vulvar dyesthesias
- Male genital skin pain
- Penoscrotodynia
- Persistent sexual arousal syndrome
- Persistent genital arousal disorder

Abbreviation: RGS, restless genital syndrome.

Discussion

We present a patient with PD who developed disabling genital discomfort in the early disease stage. She had no atypical signs, and her PD was responsive to levodopa. Although she had motor fluctuations, her genital symptoms were unrelated to the wearing-off periods, consistently occurring in the evening and night after sitting or lying still. Her symptoms were very similar to those previously described in RGS and described response to pramipexole, 0.25 mg, at night improved the genital discomfort within a few days, with sustained benefit over the subsequent 9 months. However, the motor fluctuations became refractory to increments in therapy, and we are considering deep brain stimulation.

Conclusions

In summary, RGS is a rare disorder that can be a source of distress and disability. In patients with PD, this should be included in the differential diagnosis of genital symptoms and restlessness, along with nonmotor off and akathisia. A detailed clinical assessment is essential for this diagnosis, and treatment with DA can be beneficial. Restless genital syndrome should be considered a phenotype of RLS, as should restless bladder and restless abdomen. It is important to raise awareness of this disabling but treatable condition.
Role of the Funder/Sponsor: The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

REFERENCES