

# Elagolix to treat menstrual related symptom exacerbations in early onset Parkinson disease: A Case Report

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## INTRODUCTION

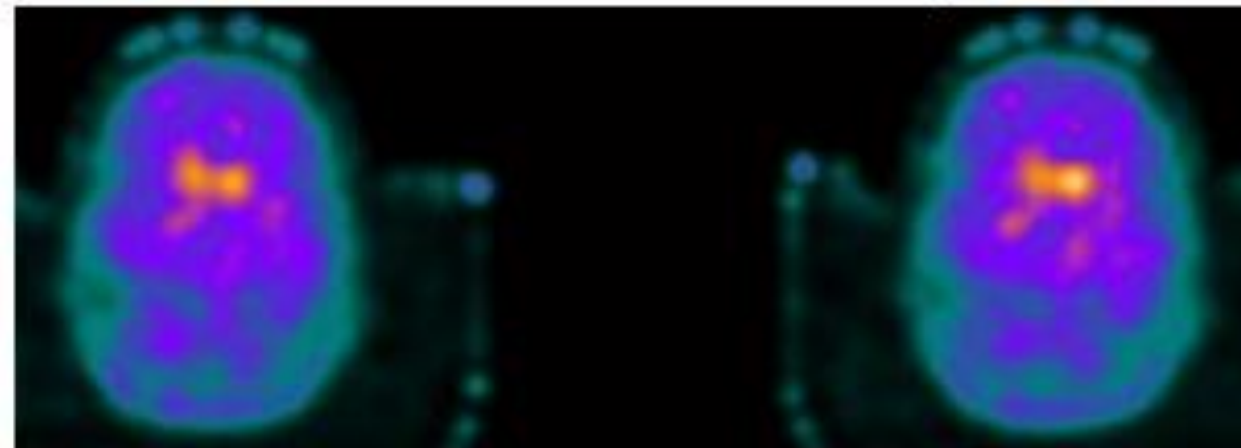
- Parkinson's disease (PD) is a neurodegenerative disorder that leads to loss of dopaminergic neurons.
- PD Has higher incidence in men and elderly.
- Women of reproductive age experience worse symptoms, increased progression of disease, and poor response to treatment.

## PREMENSTRUAL EXACERBATION

- Menstrual Fluctuations of PD symptoms have been described in literature.
- The role of estrogen is not fully understood.
- Whether estrogen suppresses or enhances the nigrostriatal pathway is unclear
- No guidelines for the management of premenstrual exacerbation of symptoms.

## CASE REPORT

- 48-years old G1P0 with early onset PD at the age of 44.
- **PHX:** Arterial Thrombosis, Autoimmune progesterone dermatitis.
- **SYMPTOMS:** Stuttering, drooling, loss of balance, and festination. Later progressed to excessive startle and myoclonus, shuffling gait, and right-sided jerky tremor.
- **CYCLIC FLUCTUATION:** Worsening PD symptoms and pain prior to the onset of menses
- **WORK UP:** Negative MRI, Positive DaT scan, positive response to a trial of carbidopa and levodopa.
- **TREATMENT:** Elagolix 150mg orally daily.



## TREATMENTS AND CHALLENGES

Combined Oral Contraceptives

**CONTRAINDICATED:**  
Thrombosis History

Progesterone Therapy

**CONTRAINDICATED:**  
Autoimmune progesterone dermatitis

Uptitrating PD medications

**POORLY TOLERATED:**  
Medication side effects

GnRH Agonist

**POORLY TOLERATED:**  
Vasomotor symptoms

Acetazolamide

**UNCLEAR MODE OF ACTION IN PD:**  
Used to treat premenstrual migraines

GnRH Antagonist  
'ELAGOLIX'

\* Rapid , dose-dependent inhibition of the gonadal axis  
\* Easy administration

## CONCLUSION

Perimenstrual worsening of PD symptoms may be successfully treated with GnRH antagonists in patients with contraindication to hormonal therapy.