Outpatient management of Parkinson's Disease patients with continuous subcutaneous infusion of Foslevodopa/Foscarbidopa

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Introduction and Objective:

Motor fluctuations and OFF periods represent a major therapeutic challenge in the advanced stages of Parkinson's disease (PD). While oral levodopa remains the gold-standard of symptomatic treatment, its pulsatile delivery contributes to the emergence of motor complications over time.
The continuous subcutaneous infusion of Fosflevodopa/Fosfcarbidopa offers a promising alternative by delivering stable plasma levels of levodopa with a less invasive procedure. Its use in outpatient settings could expand access to continuous dopaminergic stimulation while reducing the burden on healthcare systems [1,2]. The aim of this study is o describe the outpatient initiation, dose adjustment, and follow-up of PD patients treated with continuous subcutaneous infusion of Foslevodopa/Foscarbidopa in the Movement Disorders Centre of the AOU Sassari.

Methods:

We report a case series of PD patients with advanced motor fluctuations who were initiated on Foslevodopa/Foscarbidopa via continuous subcutaneous infusion in an outpatient setting. Patients were assessed for eligibility based on response to oral levodopa and clinical criteria for device-aided therapies. Dose adjustment was performed over several days under clinical monitoring. Data on motor response, ON/OFF fluctuations, dyskinesia, non-motor symptoms, adverse effects, and patient satisfaction were collected.

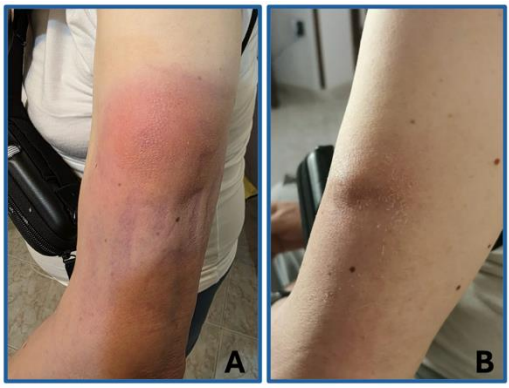

Figure 1. *Adverse cutaneous reaction (A), successfully treated with amoxicillin (B).*

Results:

Five patients (4 males, mean age 69 ± 11 years; disease duration 10.2 ± 5.5 years; mean Hoehn-Yahr stage 2.8 ± 0.3) were successfully started on Foslevodopa/Foscarbidopa infusion as outpatients in the Day Hospital of the Neurological Unit of the AOU Sassari from May 2024 to June 2025. All patients reported a significant reduction in OFF time and improvement in daily activities within the first weeks. Mild and transient infusion site reactions were observed in 2 patients, while one patient developed an important skin reaction (probability a cellulitis - Figure 1A), successfully treated with oral amoxicillin (Figure 1B). No systemic adverse events were detected, and no hospital admissions were required. Treatment adherence and satisfaction were high, and no discontinuations occurred during the follow-up period.

Conclusion:

Outpatient initiation and management of Foslevodopa/Foscarbidopa subcutaneous infusion is feasible and well-tolerated in selected PD patients. This strategy may increase access to device-aided therapies, reduce the burden on inpatient services, and improve patient autonomy. Further studies are needed to validate these findings in larger cohorts.

References:

[1] Aubignat M. & Tir M. Continuous Subcutaneous Foslevodopa-Foscarbidopa in Parkinson's Disease: A Mini-Review of Current Scope and Future Outlook. Movement Disorders Clinical Practice, 2024. doi: 10.1002/mdc3.14161
[2] Koegl sperger T. et al. Real-world experience with continuous subcutaneous foslevodopa/ foscarbidopa infusion: insights and recommendations. Journal of Neural Transmission, 2025. doi.org/10.1007/s00702-025-02911-5