Comparative Effectiveness of Carbidopa/Levodopa Enteral Suspension and Deep Brain Stimulation on Pill Burden Reduction in Medicare Fee-for-Service Patients with Advanced Parkinson's Disease

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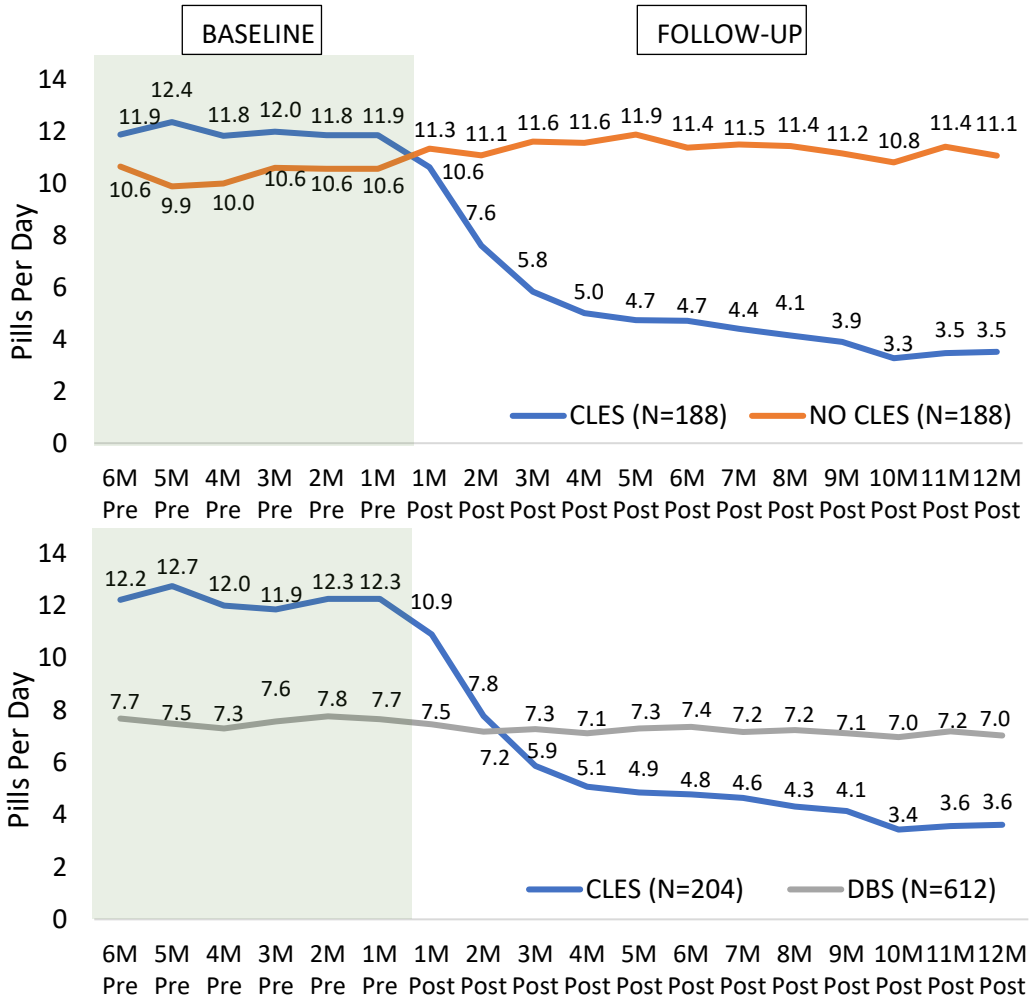
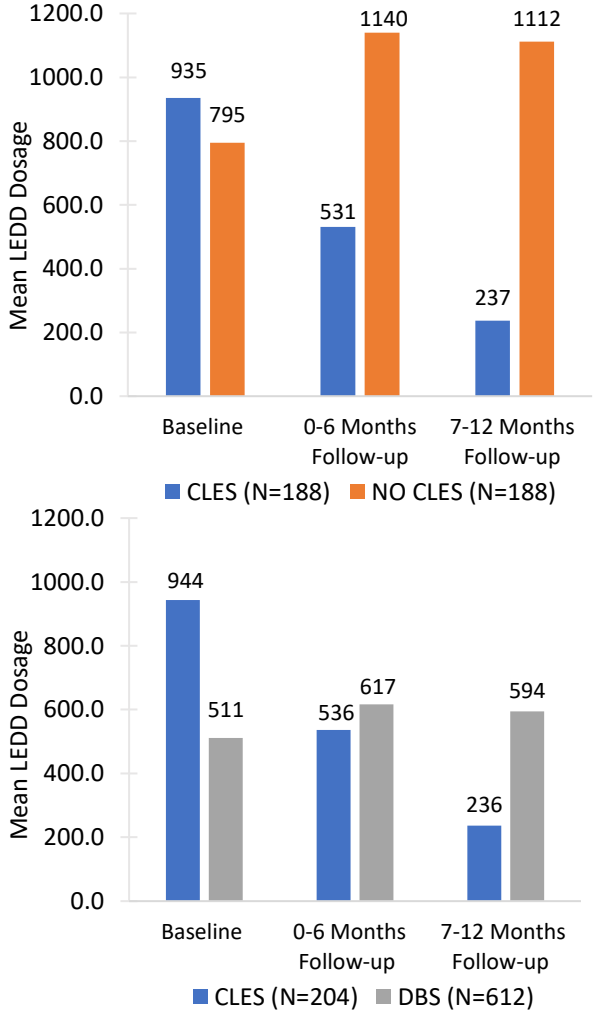
ORAL PARKINSON'S DISEASE MEDICATIONS



LEVODOPA EQUIVALENT DAILY DOSES



OBJECTIVE: Device-aided therapies of Carbidopa/Levodopa Enteral Suspension (CLES) and Deep Brain Stimulation (DBS) were compared for their efficacy to reduce oral pill burden and levodopa equivalent daily dose in 100% Medicare Fee-For-Service patients with Advanced Parkinson's Disease (APD).

METHODS: In this retrospective cohort study from 2014-2018, patients receiving CLES were propensity matched 1:1 with CLES eligible patients who did not receive treatment (NO CLES) and 1:3 with those receiving DBS. Oral pill burden and levodopa equivalent daily doses (LEDD) were assessed 6 months prior to treatment (baseline) and 0-6 months and 7-12 months after treatment (follow-up).

RESULTS: Mean age and gender distribution were similar between matched CLES and NO CLES (71.9 vs 72.0) and CLES and DBS (71.6 vs 71.7). Patients who initiated CLES had significantly reduced oral pill burden with concomitant lower LEDD compared to NO CLES and to patients with DBS.

CONCLUSION: The significant reduction in oral pills per day and LEDD observed with CLES suggests that pill burden reduction could be considered a treatment goal for patients with APD challenged by complex polypharmacy regimens.

PEER-REVIEWED FEATURE

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