

PERSISTENCE ON DROXIDOPA FOR THE MANAGEMENT OF ORTHOSTATIC HYPOTENSION AT AN INTEGRATED CARE CENTER

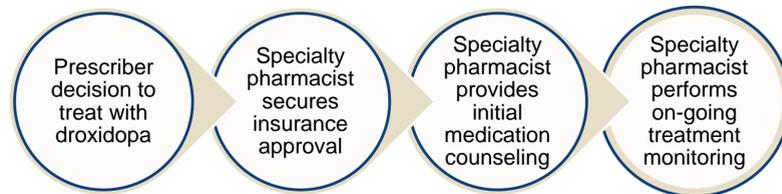
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BACKGROUND

- Droxidopa, an α/β agonist indicated for the treatment of neurogenic orthostatic hypotension¹, has shown improvement in blood pressure, quality of life, and fall reduction^{2,3}
- However, previous reports have found persistence to therapy to be challenging, most often due to lack of efficacy and adverse events (AEs).⁴
- Frequent monitoring and support by an integrated specialty pharmacist may improve persistence to droxidopa.

Specialty Pharmacist Role in Outpatient Neurology Clinic



OBJECTIVE

Evaluate persistence on droxidopa therapy in adult patients with symptomatic orthostatic hypotension receiving care within an integrated specialty pharmacy model

METHODS

Design	Single-center, retrospective cohort
Sample	Adult patients prescribed droxidopa with ≥ 3 medication fills by the center's specialty pharmacy
Study period	May 2017 - September 2019
Primary outcome	Persistence, measured as time to first non-persistent event, defined as a coverage lapse > 60 days
Secondary Outcomes	Adherence measured by proportion of days covered (PDC) Health outcomes including patient-reported AEs and falls, emergency room visits, and hospitalizations

Table 1. Patient characteristics (n=89)

Patient Characteristic	n (%)
Age (mean \pm standard deviation)	71 \pm 8
Male gender	57(64)
Race	
Caucasian	76(85)
African American	11(12)
Not reported	2(2)
Insurance type	
Commercial	15(17)
Medicare	67(75)
Medicaid	2(2)
Tricare	5(6)
Primary diagnosis	
Parkinson's disease	36(40)
Pure autonomic failure	29(33)
Multiple system atrophy	10(11)
Non-diabetic autonomic neuropathy	4(4)
Non-neurogenic orthostatic hypotension	4(4)
Other*	6(7)

*Other diagnoses: dopamine beta-hydroxylase deficiency, amyloidosis, diabetic neuropathy, autonomic failure secondary to diabetes, postural orthostatic tachycardia syndrome

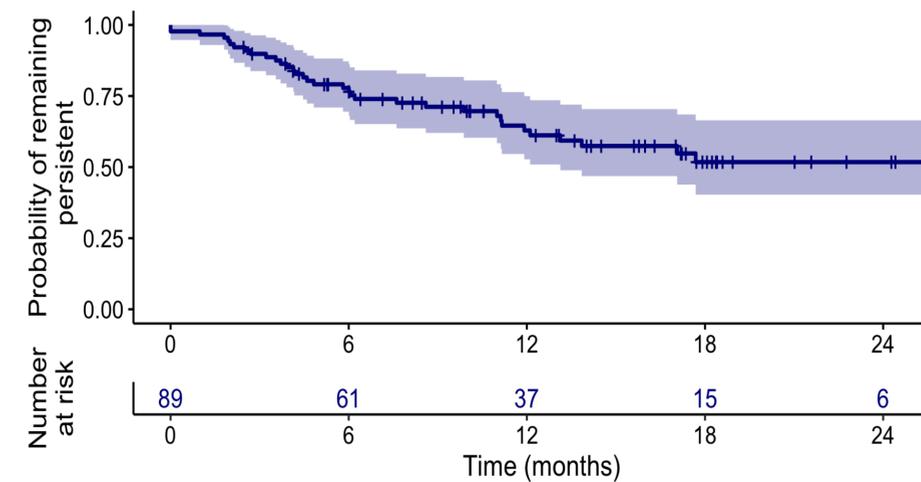
Table 2. Frequency of healthcare utilization related to droxidopa or orthostatic hypotension (n=89)

Events	Emergency department (ED) visit	Hospitalization
0	78 (87.6%)	80 (89.9%)
1	9 (10.1%)	8 (9%)
2	3 (1.1%)	1 (1.1%)
3	3 (1.1%)	--

- ED visit and hospitalization data were collected from the electronic health record.
- Reasons for ED visits and hospitalizations included syncope and falls.

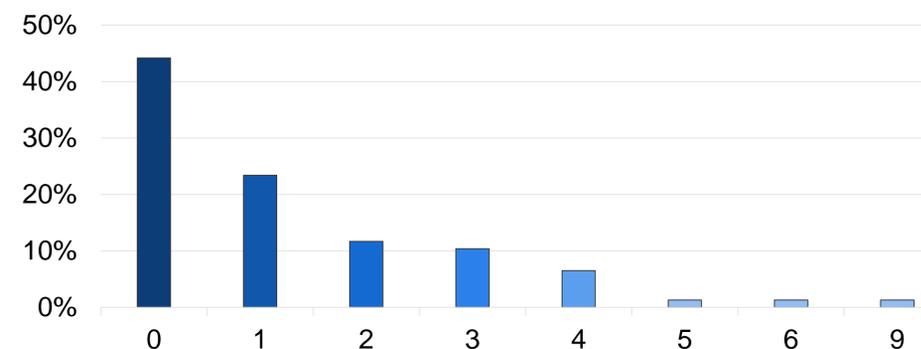
RESULTS

Figure 1. Medication persistence (n=89)



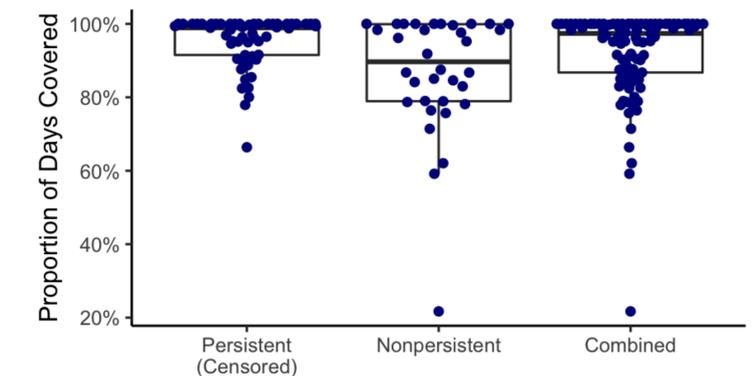
- The probability of a patient in the study still being on medication through 12 months is 0.63 (95% CI 0.53-0.75) with 23 patients censored.
- At 6 months, 61 patients (68.5%) were persistent.
- At the end of the study period, 55 patients (61.8%) were persistent.
- The median month of follow-up was 10.9 months.

Figure 2. Fall rate (n=77)



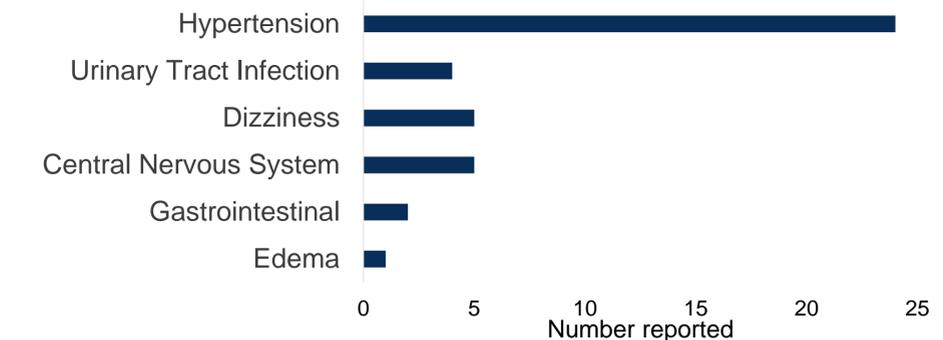
- Patient-reported fall data was available for 77 patients.
- More than half of these patients reported at least one fall on droxidopa.

Figure 3. Median adherence (n=89)



- Median PDC: persistent = 0.99, non-persistent = 0.90, combined = 0.97
- Mean number of fills: persistent = 14.8 fills, non-persistent = 10.1 fills
- 13% (n=12) of patients considered non-adherent with PDC < 80%

Figure 4. Patient-reported adverse events (n=28)



- A total of 41 AEs were reported by 28 patients.
- Hypertension was the most commonly reported AE.

CONCLUSIONS

- Despite close monitoring for AEs and treatment efficacy, many patients were not persistent through 12 months of therapy. In those that maintain on therapy, high rates of adherence were seen.
- The neurology specialty pharmacist closely monitored efficacy and AEs.
- Future analysis will focus on reasons for non-persistence and correlation between AEs and healthcare utilization with persistence.