ABSTRACT

Objective: To determine clinical factors associated with adverse effects (AE) to apomorphine (APO).

Background: Poor drug tolerance limits APO use in nearly one fifth of patients. While AE associated with APO are known, clinical features that predict the appearance of AE are not well-defined.

Methods: We prospectively recorded AE in consecutive patients treated with APO and correlated AE with pre-injection clinical features.

Results: Patients already taking an oral dopamine agonist had less orthostatic hypotension (OH). Frequency of nausea was similar in patients who completed 3 days of premedication with trimethobenzamide (TMB) to those treated with 1 dose.

Conclusions: Concomitant oral dopamine agonist use may reduce the risk of APO-related OH. Additional studies are warranted to assess whether a shorter course of TMB adequately prevents nausea.

INTRODUCTION

Many patients with advanced Parkinson’s disease (PD) develop motor fluctuation that are refractory to adjustments in oral dopaminergic therapies. Intermittent subcutaneous injection of APO, a nonergot dopamine agonist, has a rapid onset of action and is an effective rescue medication for unpredictable “off” periods in this population. However, despite proven efficacy, APO use is limited by potential AE, and approximately 20% of patients discontinue APO because of an AE. ¹ The spectrum and frequency of AE from APO is known, the most common being nausea, dyskinesias, hallucinations, drowsiness and orthostatic hypotension (OH), yet predictors of AE are less studied.

METHODS

We evaluated 26 consecutive patients (mean age 60.8±10.3, mean disease duration 13.2±5.0 yrs.) who were administered subcutaneous APO 0.2 mg.

RESULTS

APO-related adverse events were recorded in 22 patients. The most common AE were drowsiness (23%), nausea (12%), dyskinesias (19%), hallucinations (4%), orthostatic hypotension (15%), and yawning (54%).

Patients taking an oral dopamine agonist had less OH (P < 0.005), but OH was not associated with prior DRT-related orthostasis, total DRT dosage, antihypertensive use, age or disease duration.

APO-related drowsiness and nausea co-occurred (P < 0.03), but were not predicted by other factors, including prior DRT-related drowsiness or nausea.

Nausea frequency was similar in patients (N=13) who completed 3 days of premedication with trimethobenzamide (TMB) to those treated with 1 dose.

Patients who were taking oral dopamine agonists experienced less APO-related OH independent of other factors. Previous work shows that patients taking levodopa tolerate APO better than those not on dopamine replacement therapy.² ³ Our data suggest oral dopamine agonists in particular may mitigate against APO-related OH.

We could not demonstrate that three days of TMB premedication is superior to a single dose in preventing APO-associated nausea. A larger cohort is needed to confirm whether 1 TMB dose is sufficient, as this would simplify test-dose procedures.

REFERENCES

