do not persist for more than three weeks. Likewise, there was no evidence of haemoptoerin deposition in the stalk which might be expected after hemorrhage. Stalk enlargement could have been an effect of untreated diabetes insipidus, in which the first case might have expected resolution of the abnormality with treatment. However, the swelling persisted for three months despite adequate treatment of the diabetes insipidus. It is possible that unrecognized injury or infection with ensuing inflammation resulted in the swelling observed initially. It is known that insults to the stalk can lead to reorganisation and proximal enlargement. We may have observed the resolution of such changes.

We conclude that pituitary stalk enlargement may occur in idiopathic cranial diabetes insipidus, persist for months, and eventually disappear. Serial imaging with CT or MRI will exclude progressive infiltrative or neoplastic causes.

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Ropinirole (SK and F 101468) in the treatment of Parkinson's disease

Ropinirole ([2-[(dipropylamino)ethyl]-1,3-dihydro-2H-indol-3-one], a selective dopamine D2 agonist has been shown to have anti-Parkinsonian effects at doses between 0.6 mg twice a day and 2 mg twice a day in a open inpatient study. We report the results of a further outpatient open study in fourteen patients with idiopathic Parkinson's disease.

Participating in the study were seven patients with presumed Parkinson's disease (mean age 56.5 years, disease duration 2.5 years and mean Hoehn and Yahr Stage II) and seven patients with disabling levodopa-induced on-off oscillations (median age 66 years, disease duration 10 years and duration of levodopa treatment 4.0 years, daily levodopa dose 750 mg, median duration of disabling oscillations 1.0 years, mean Hoehn and Yahr stage when "off" III and when "on" II). Four of the patients treated with levodopa had severe interdose chorea and one patient had biphasic dyskinesias. Three patients were also receiving anticholinergic medication, three were taking L-depenyl (selegiline); none of the patients had a history of psychiatric disorder or evidence of hepatic, renal or cardiovascular dysfunction.

Both groups were initially treated with 0.6 mg of ropinirole twice daily for one week. The dose was increased to 1 mg twice daily for the subsequent week. Further weekly increases of 1 mg twice daily to a maximum of 7 mg twice a day over an eight week period. If adverse reactions developed, patients continued on the previously tolerated dose for another week. If the dose of less than 7 mg twice a day was made; if gastrointestinal side-effects or symptomatic orthostatic hypotension re-occurred, despite modification of ropinirole dosing, dopaminede 20 mg twice daily was continued in such cases, for the remaining trial period. If interdose dyskinesias increased in the oscillating patients levodopa was concomitantly reduced. After each dose the patient had a Webster score which reduced from 14 to 10, a 44% increase in the number of finger taps and a 40% decrease in walking time. The second patient had a dose of finger taps in numbers of finger taps, but could not increase the dose further because of nausea despite dopamine. Two of the de novo patients dropped out before the treatment period was finished, one because of intolerance of levodopa and one because of a diagnosis of Parkinson's disease. Four of the seven patients with levodopa-induced on-off oscillations showed a worthwhile clinical response with a reduction of mean "off" hours per day from 3.9 (1.4–6.5) to 1.4 (0.4–2.9) (p < 0.05). A dose needed to be introduced to obtain an optimal response was 5.8 mg per day (3.2–8 mg), but beneficial effects began at 2.3 mg daily (1.2–3.4). The duration and intensity of interdose dyskinesias increased in three patients, but diminished to even below baseline level by a mean reduction of 15% of the total daily levodopa dose in two patients. Two patients treated with up to 10 mg a day in addition to the levodopa dose did not improve. In one, the mean "off" hours remained unaffected, while the other experienced prolonged episodes of disabling bitemporal dyskinesias. One patient developed intolerable drowsiness and somnolence at 2 mg a day and discontinued the study and two had nausea and symptomatic orthostatic hypotension controlled by dopaminede. Laboratory tests for blood dyscrasias remained normal throughout the eight week period.

We conclude that ropinirole has anti-Parkinsonian effect and that the optimum dose range for most patients may be 4–6 mg a day. Adverse reactions are limited to those seen with other dopamine receptor agonists and can be reduced by the use of dopaminede and possibly more gradual dose increments than occurred in this trial. We would recommend in future that oral levodopa and subcutaneous apomorphine tests are carried out on previously untreated patients with Parkinson's syndrome before the assessment of a new dopaminergic agonist, to exclude as far as possible patients with multi-system degeneration unresponsive to this group of drugs.


Letters to the Editor

Cardiovascular autonomic function tests are three Valsalva and six deep breaths necessary or will singles do?

In the assessment of autonomic neuropathy, two widely used tests of cardiovascular autonomic function assess the heart rate response to three consecutive Valsalva manoeuvres and to six consecutive deep breaths. We aimed to see whether the response to a single Valsalva manoeuvre was significantly different from that from the average of three and whether the response to a single deep breath was significantly different from that from the average of six deep breaths. The study group comprised 15 diabetic patients, 25 male and 11 female, 15 insulin treated, mean age 54 years (range 30–82), mean duration of diabetes 17.4 years (range 3 months–51 years). All had symptoms which may have been due to diabetic neuropathy.

They underwent heart rate monitoring using a computer-assisted system for the collection and analysis of heart rate data for cardiovascular autonomic function tests (RR Medical Electronics, Letchworth, UK). A Valsalva manoeuvre was performed by the patient blowing into the tube of a sphygmomanometer and sustaining a pressure of 40 mm Hg for 15 seconds while the R-R interval was recorded, the result being expressed as the Valsalva ratio: the longest R-R interval during the manoeuvre. All the patients performed the manoeuvre properly and, as far as could be ascertained, achieved an intrathoracic pressure which was adequately raised. Heart rate variability during deep breathing was calculated by the patient resting quietly and breathing deeply in for over five seconds and

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