Materials

Patients

Informed consent was obtained from both patients and control subjects participating in the studies. Patients with idiopathic PD and controls were unrelated ethnically Japanese (Mongoloid).

A total of 116 idiopathic PD outpatients (48 males and 68 females, mean age: 68.2±9.2) treated with L-dopa were supplied from 4 hospitals in Kanto area. There were no differences for age, onset of age, administration of L-dopa, and major clinical symptoms between male and female patients with PD (Table 1). Genomic DNA's were prepared from whole blood samples collected in disodium EDTA (3 mg / *ml* blood). Among them, 93 outpatients (39 males and 54 females, mean age: 69.1±7.6) were used for analysis of ALDH2 and questionnaire for alcohol drinking. Sixty-seven outpatients (29 males and 38 females, mean age: 64.12±9.23) were used for TPQ. Twenty-one patients (31.4 %) were being prescribed with anti-depressant drugs. All patients (116) were analyzed for the genotypes of the CCK gene.

Controls

Two hundred and ninety-seven control subjects (156 males and 141 females, mean age: 33.9±8.0) from company employees in Tokyo who volunteered to take part in this study were used for analysis of ALDH2 and for alcohol drinking behavior. Sixty-nine volunteers for TPQ investigation were recruited from age-matched group in the same area of PD patients (36 males and 33 females, mean age: 65.93±4.17). Furthermore, analysis of the CCK gene was made in 95 age-matched volunteers in Ibaraki (82 males and 13 female, mean age: 64. 6±9.0).