To examine the effects of cognitive status in Parkinson’s disease (PD) on latency and errors in antisaccades. We hypothesized that both parameters would be impaired in PD participants with mild cognitive impairment and dementia, and would correlate with Montreal Cognitive Assessment (MoCA) score. Saccadic function and the MoCA were assessed in 45 controls and 89 PD patients. Fifty-five patients were cognitively normal (PDN), 21 had mild cognitive impairment (PD-MCI) and 13 had dementia (PDD). Extinction of a central fixation stimulus (duration 1.5s) was immediately followed by a peripheral nontarget presented for 2s at either 5, 10 or 15 deg left or right of centre. Fixation offset and a simultaneous tone cued subjects to make an antisaccade as rapidly as possible to the mirror opposite location. Latency was measured from fixation offset to saccade initiation and errors were the proportion of saccades towards the incorrect location. The groups showed differences on latencies (ms, mean (SD): Control 404(75), PDN 439(72), PD-MCI 556(123), PDD 582(165)) and proportion of saccades with errors (Control 0.43(0.23), PDN 0.46(0.23), PD-MCI 0.73(0.21), PDD 0.84(0.12), F (2,81)>6.0, p< 0.001) after adjustment for age, education, premorbid-IQ, UPDRS motor-score, and PD-duration. The PDD and PD-MCI group did not differ significantly but both showed poorer performance than the PDN and Controls, which did not differ. Latency ($r=-0.29$) and proportion of errors ($r=-0.50$; both $p< 0.001$) correlated with MoCA score. Antisaccade performance may help identify cognitively impaired PD patients at risk of dementia.