Hypodipsia discriminates progressive supranuclear palsy from other parkinsonian syndromes.

The objective of this study was to evaluate whether the sensation of thirst differs between patients with progressive supranuclear palsy (PSP), multiple system atrophy with predominant parkinsonism (MSA-P), and Parkinson’s disease (PD). We administered a standardized thirst questionnaire to age-, sex-, and stage-matched patients with probable PSP, PD, and MSA-P and healthy controls (HC), n = 15/group. In an independent cohort (n = 10/group), we provoked thirst by infusing hypertonic NaCl in age-, sex-, and stage-matched patients with PSP, PD, and MSA-P and recorded plasma osmolality and thirst (visual analog scale). On questioning, 73% of PSP patients reported a reduced sensation of thirst (hypodipsia) compared with previous years (HC, 0%; PD, 7%; MSA-P, 7%; P < .0001). On NaCl infusion, PSP patients reported significantly lower thirst than did PD and MSA-P patients for all times from 20 to 95 minutes (P < .05). The thirst score at 25 minutes discriminated individual PSP patients well from PD and MSA-P patients. Hypodipsia appears helpful in differentiating PSP from PD and MSA-P.