Clinical pain and experimental pain sensitivity in progressive supranuclear palsy.

Abstract:
We aimed to assess spinal nociception and experimental pain sensitivity in progressive supranuclear palsy-Richardson's syndrome (PSP-R) compared to patients with Parkinson's disease (PD) and healthy controls (HC). Spinal nociception as measured by the nociceptive flexion reflex (NFR) and experimental pain sensitivity as measured by heat and electrical pain thresholds were determined in non-demented, non-depressed, probable PSP-R patients (N = 8), PD patients (N = 19) and 17 HC. PSP-R patients exhibited lower electrical pain thresholds and a tendency for lower NFR thresholds as compared to HC. No significant differences between PSP-R and PD patients were found with respect to experimentally-induced pain. However, significantly less PSP-R than PD patients reported disease-related pain. Degeneration of the descending inhibitory control system within the brainstem in PSP-R might lead to increased experimental pain sensitivity while frontal cortical deterioration may alter self-estimation of pain.