Forel's field H

Stereotactic lesion in the Forel's field H (campotomy) was proposed in 1963 to treat Parkinson disease (PD) symptoms. Despite its rationale, very few data on this approach have emerged. Additionally, no study has assessed its effects on nonmotor symptoms, neuropsychological functions and quality of life.

To provide a prospective 2-yr assessment of motor, nonmotor, neuropsychological and quality of life variables after unilateral campotomy.

Twelve PD patients were prospectively evaluated using the Unified Parkinson's Disease Rating Scale (UPDRS), the Dyskinesia Rating Scale and the Parkinson's disease quality of life questionnaire (PDQ39) before campotomy, and after 6 and 24 mo. Nonmotor, neuropsychiatric, neuropsychological and quality of life variables were assessed. The impact of PD on global health was also rated.

A significant reduction in contralateral rest tremor (65.7%, P < .001), rigidity (87.8%, P < .001), bradykinesia (68%, P < .001) and axial symptoms (24.2%, P < .05) in offmedication condition led to a 43.9% reduction in UPSDRS III scores 2 yr after campotomy (P < .001). Gait improved by 31.9% (P < .05) and walking time to cover 7 m was reduced by 43.2% (P < .05). Pain decreased by 33.4% (P < .01), while neuropsychiatric and neuropsychological functions did not change. Quality of life improved by 37.8% (P < .05), in line with a 46.7% reduction of disease impact on global health (P < .001).

A significant 2-yr improvement of motor symptoms, gait performance and pain was obtained after unilateral campotomy without significant changes to cognition. Quality of life markedly improved in parallel with a significant reduction of PD burden on global health [1)].

1)
Godinho F, Magnin M, Filho PT, Reis P, Moraes O, Nascimento M, Costa C, de Oliveira MO, Rocha MS. Stereotactic Lesion in the Forel's Field H: A 2-Years Prospective Open-Label Study on Motor and Nonmotor Symptoms, Neuropsychological Functions, and Quality of Life in Parkinson Disease. Neurosurgery. 2019 Oct 1;85(4):E650-E659. doi: 10.1093/neuros/nyz039. PubMed PMID: 30815692.