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## **NEUROCOGNITIVE BASIS OF IMPULSIVITY IN PERSONALITY DISORDERS**

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## Aim:

- Whether patients with personality disorders of borderline and antisocial type have a specific pattern of neurocognitive deficits
- Whether impulsivity measured with clinical rating scales is related with performance on neuropsychological tests of risk taking which is sensitive to ventrofrontal cortex lesions.

**Method:** 20 patients and their age, sex and IQ matched controls participated in the study. Each patient and control was administered validated clinical rating scales in order to:

- 1. Ascertain the diagnosis with respect to DSM-IV criteria (Structured Clinical Interview for DSM: Personality Disorder.
- 2. Obtain a measure of clinical impulsivity (Barratt Impulsiveness scale).
- Ascertain the presence of heritable personality traits (Dimensional Aspects Of Personality Pathology Disorder-Basic Questionnaire).
- 4. Exclude other major psychiatric disorders (Clinical Psychopathology Rating Scale).

They were administered National Adult Reading Test (NART) to estimate IQ.A battery of neuropsychological tests of memory and executive function specifically sensitive to frontal (dorsal or ventral) or temporal lobe damage were administered from Cambridge Automated Neuropsychological Test battery (CANTAB).

**Results:** On Neuropsychological testing patients fared poorly on tests sensitive to planning and risk taking compared to controls. Patients had high mean scores on Barratt impulsiveness scale. The high scores were associated with performance on Tower Of London, Bechara test and paired associated learning. Impulsivity was associated with anxiousness and rejection traits of DAPP-BQ. There was a co-relation between some basic dispositional traits of DAPP-BQ with performance on Bechara, Gambling and Paired Associated Learning tests.

Conclusion: Personality disordered patients show broad range of neurocognitive deficits on test s sensitive to frontal cortex.