Aarhus, November 2012



ΙΝΥΙΤΑΤΙΟΝ

Impulse Control Disorders in Parkinson's Disease

MSc (Psychology), Mette Buhl Callesen will defend her PhD thesis: Impulse Control Disorders in Parkinson's Disease.

Throughout the past decade, it has been established that dopaminergic medication administered to relieve motor symptoms in Parkinson's disease (PD) impact cognition and emotion in complex ways and has been associated with impulse control disorders (ICDs) affecting up to 16% of patients. Utilizing different methodologies, the scope of this dissertation was to contribute to explaining the phenomenon of ICDs in PD. Study 1 was a systematic review of 98 empirical studies investigating ICDs in PD. Studies 2 and 3 were epidemiological surveys evaluating 504 Danish patients with PD on symptoms of ICDs, depression, personality traits, and demographic and clinical variables including motor symptomatology. Finally, study 4 is an ongoing experimental PET study assessing dopaminergic neurotransmission during gambling in PD patients with and without pathological gambling. The main findings of the studies are that ICDs are common in PD and almost 36% of Danish PD patients present symptoms herof sometime during PD. The behavioral disorders are associated with male sex, younger age, younger age



at PD onset, longer disease duration, more pronounced motor symptomatology, symptoms of depression, high levels of neuroticism, and low levels of conscientiousness and agreeableness. ICDs in PD thus appear to share common features of personality with depression in PD including increased neuroticism and decreased conscientiousness. However, while these specific personality traits alongside low levels of extroversion predict depression in PD, only neuroticism act as a predictor for ICDs in PD. In stead, current smoking appears to be the strongest predictor for ICDs in PD. Furthermore, the preliminary findings of study 4 revealed a gambling-evoked dopamine release in the ventral striatum associated with pathological gambling in PD, potentially reinforcing the gambling behavior. In summary, our findings support the concept of treatment-related ICDs in PD having important clinical correlates that may allow early identification of patients at risk for developing such behavioral complications.

DATE:	Monday, 25 November 2013
TIME:	14:00 - 16:00
PLACE:	DNC Auditorium (Palle Juul-Jensen Auditorium),
	Aarhus University Hospital, Building 10G, Nørrebrogade 44, 8000 Aarhus C.

Opponents:

- · Professor Antoine Bechara, Department of Psychology, University of Southern California, LA, USA
- Professor Valerie Voon, Department of Psychiatry, University of Cambridge, UK
- · Professor Troels Staehelin Jensen, Department of Clinical Medicine, Aarhus University

Main Supervisor:

Associate Professor Arne Møller, Department of Clinical Medicine, Aarhus University

The defense is public and will be conducted in English. ALL ARE WELCOME.

For more information about the PhD defense, please contact: Mette Buhl Callesen / 2374 6032 buhl@pet.auh.dk