

## **INTEGRATION OF EMOTIONS TOWARDS DECISION-MAKING: BEHAVIOURAL PERFORMANCES OF OCD PATIENTS AND THEIR MEG CORRELATES COMPARED TO HEALTHY CONTROLS**

*A.-E. Lerebours, W.I.A. Haynes, K. N'Diaye, L. Mallet*

CRICM, UPMC, Paris, France

Obsessive compulsive disorder is characterised by repetitive behaviour, which is most often repetitive checking. Literature has suggested that these may be due to a lack of cognitive control on automated behavioural patterns. This can be interpreted as a dysfunction of behavioural selection by cortico-basal ganglionic loops. More precisely, we hypothesise that this dysfunction is due to a modification of decisional thresholds.

OCD patients show modifications in a circuit involving the frontal cortex and basal ganglia. Therefore, modifications in the decisional threshold and faulty behavioural selection could be due to altered integration of limbic and associative information coded by prefrontal areas.

To this aim, we compared behavioural performances of 20 OCD patients and 20 healthy volunteers on a decision-making task. This task included different difficulty levels (associative information), different emotional primes (IAPS) and feedback (limbic information). We hypothesised a lesser variability of the decisional threshold in patients, as well as less interaction between limbic and associative information. These would be linked to modifications in the power spectrum of prefrontal electrophysiological activities.