

Poster presentation

## Effect of illness duration on cognitive function of OCD: a neuropsychological and functional neuroimaging study

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from International Society on Brain and Behaviour: 2nd International Congress on Brain and Behaviour Thessaloniki, Greece. 17–20 November 2005

Published: 28 February 2006

*Annals of General Psychiatry* 2006, **5**(Suppl 1):S138 doi:10.1186/1744-859X-5-S1-S138

### Background

Concerning inconsistency among previous reports that examined cognitive function of OCD, we should consider the heterogeneity of OCD such as symptom-based clusters, degree of insight, age of onset and comorbid diagnoses. In the present study, we examined duration effect on cognitive function of OCD by neuropsychological and functional neuroimaging methods.

### Materials and methods

Thirty-two OCD patients whose diagnoses were confirmed by SCID-IIIR participated in the study. We administered them neuropsychological tests including WAIS-R, Stroop test, WCST, WMS-R and R-OCFT. We also examined them using functional MRI (fMRI) during the Chinese character version Stroop task that is strongly related with attention. Then the patients were divided into two groups by duration of illness; short-term illness group (Group S,  $n = 17$ ,  $5.5 \pm 3.1$  years) and long-term illness group (Group L,  $n = 15$ ,  $20.3 \pm 6.1$  years). There was no significant group difference in background and clinical characteristics but for the mean age of onset (Group S;  $25.5 \pm 10.2$  y.o., Group L;  $15.3 \pm 7.1$  y.o.).

### Results

Group L showed significant attention deficit in the Stroop test and the WMS-R compared with Group S, though any other neuropsychological dysfunction such as intellectual level, executive function, verbal memory, and nonverbal memory was found in this group. In fMRI, both the two groups showed similar activation pattern. Group L, how-

ever, showed stronger activation than Group S in the ACC, the right thalamus, the middle temporal gyrus and the cerebellum.

### Discussion

It was suggested that long-term persistence of OCD caused regional brain dysfunction of ACC and disability of attention.

### References

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