

CS02-03

## IMAGING DEPRESSION

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Context: PET and MRI investigations performed in patient groups with major depressive disorder (MDD) by our team in Orsay searched for differences of regional brain measures during treatments.

Results: In the patient samples investigated, thorough analysis of cortical surface and metabolism suggested marked deviations in patients with resistant depression, while abnormalities of white matter microstructure were still present in euthymic patients (1-4). Relationship with treatment response was investigated (5). Recent ALE meta-analysis of Talairach´ spatial coordinates reported in the literature on adolescent MDD confirms that imaging techniques of brain function and brain structure revealed a consistent network of frontal limbic and subcortical regions (1)

Conclusion: while the diagnosis of MDD is symptom-based by definition, brain imaging research provided a bunch of convergent information on the regions mediating the depressive syndrome, and supports a significant proportion of MDD patients have brain deviations in both regional function and regional structure measurements.

References:

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