

## DIFFUSION TENSOR IMAGING IN NON-RESISTANT UNIPOLAR MAJOR DEPRESSION: PRELIMINARY RESULTS

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Major depression is a prevalent condition which typically has a chronic and relapsing course. It is frequently accompanied by changes in brain structure and function, as well as hormonal and inflammatory markers. The relationship of these markers to response remains elusive. A growing literature documents white matter alterations in the right frontal lobe, right fusiform gyrus, left frontal lobe and right occipital lobe as revealed by lower fractional anisotropy in patients with major depression relative to healthy controls. In this pilot study we propose to explore the relationship between white matter integrity in non-resistant major depression and response to treatment. Subjects with unipolar major depression were included. Prior to initiating treatment magnetic resonance imagery was obtained. Cognitive function was evaluated with a computerized neuropsychological battery, and a blood sample for the determination of inflammatory markers was drawn. All subjects are treated with desvenlafaxine 50mg die. A possible option to increase the dose to 100mg die was available at 8 weeks. At 16 weeks the initial evaluation was repeated. We will present preliminary imaging results from the first ten patients. The data from this study may contribute to the incremental increase in evidence clarifying the neuroimmunohormonal factors characterizing depression and response to treatment.