

## **AS07-02 - BRAIN IMAGING : HELP FOR THE UNDERSTANDING OF SUICIDAL VULNERABILITY**

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Suicidal behaviour may be best understood within a stress-vulnerability model. The vulnerability is a key element that differentiates psychiatric patients who are at high risk versus those at lower risk of suicide. Neurobiological studies have strongly influenced the concept of a vulnerability to suicidal behaviour. Moreover neuropsychological studies have reported dysfunctional cognitive processes in suicide attempters. Brain imaging is a helpful tool to better understand *in vivo* their neuroanatomical basis. Neuroimaging studies mainly showed the involvement of ventrolateral orbital, dorsomedial and dorsolateralprefrontal cortices and the anterior cingulate gyrus. In addition, alterations in white matter connections have been suggested.

We will propose a neurocognitive model of suicidal act and will discuss the strengths and limitations of the neuroimaging approach of the pathophysiology and prediction of such complex human behaviours.