

Allocentric Spatial Memory in Major Depressive Disorder

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Abstract: Major depressive disorder (MDD) is associated with small hippocampal volume (Campbell et al, 2004). This structural change does not appear to be limited to later stages of the illness, but has been found in patients suffering their first episode (Frodl et al, 2002) and in healthy individuals at risk of depression (Chen et al, 2010). This suggests that small hippocampal volume may represent a vulnerability factor for developing the illness, which could potentially be detected through neurocognitive testing. The Northumberland Gallery Task was developed to contrast a cognitive ability that depends on hippocampal integrity (allocentric memory) with a cognitive ability that does not (egocentric memory). Here we present findings derived from this task in a small sample of depressed patients and matched controls. An allocentric deficit would be consistent with the small hippocampus in MDD and would support the use of neurocognitive testing in the detection of illness vulnerability.