The aim of this study is to compare the volumes of hippocampus, amygdala and subgenual prefrontal cortex among patients with melancholic depression, patients with psychotic depression and normal controls. Thirty nine patients with a diagnosis of major depression (22 with melancholic and 17 with psychotic subtype) and 18 normal controls were included in the study. Hippocampal, amygdala, anterior and posterior subgenual cortex volumes were measured by manual tracings on magnetic resonance volumetric images and compared across the 3 groups. We identified larger amygdala volumes and smaller left anterior subgenual cortex volumes in both patient groups compared to controls. There were no differences in hippocampal, right anterior and posterior subgenual cortex volumes across the 3 groups. In conclusion, melancholic and psychotic depression were not differentiated regarding the volumes of the hippocampus, the amygdala, and anterior and posterior subgenual cortex, even though amygdala volumes and left anterior subgenual cortex volume of both patient groups were differentiated compared to controls.

Key words: Neuroimaging, depression, hippocampus, amygdala
