

Density in primary visual cortex (17 visual area) from rats subjected to chronic stress

Densidad neuronal en la corteza visual primaria (área 17), en ratas sometidas a estrés crónico

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Stress can be understood as a threat to psychological or physiological integrity of the individual. Stress has previously shown to alter morphology and function of diverse structures of the Central Nervous System related to learning, memory and emotional response, such as hippocampus, amygdala and prefrontal cortex. In the current work we assessed the effect of chronic stress for immobilization on structure of primary visual cortex (area 17) in male adult Sprague-Dawley rats (n=9), of 3 months of age (250-350g.). Stressed rats (n=3) tended to show lower neuronal densities than control rats (n=3) and were significantly lower ($p < 0.05$) than recovered post-stress rats (n=3), which showed the highest neuronal densities observed. Since an inverse correlation between neuronal density and size of neuronal bodies and their respective dendrite branches, these changes might impact processing of visual information.