Histo-architectonic study of capuchin monkey occipital cortex

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Cognitive ethology area, primates' cognition, animal communication and evolutionary psychology have been getting emphasis in the last years because they are important to a better uderstanding of animal behavioral. They are also investigated as useful tools in clarifying human cognition, defined by comparative evolution. The histological organization of visual area is polar cortex type. To many animals the vision is the major sense to life of social behavioral and also to survive. There is a putative relation between lateralized behavioral variations and neuroanatomical asymmetries among the several primate species. In comparison with other Old World primates, the *Cebus* genus presents functional and morphological cortical asymmetry, and such factors are associated with primate-originated evolutionary convergence aspects. There are many unclear neurophysiological and behavioral aspects of the human neural system, therefore, the study on the neural system of Cebus suits this context by providing background for filogenetic-evolutionary correlations on neurophysiology. In this work, we studied the occipital cortex lobes of two Cebus specimens acquired from the UFG Campus II vicinities due to accidents. The brains were treated by Golgi-Cox method to visualization of neuron body and yours branch. To area of $610200 \,\mu\text{m}^2$ approximate was 5.55), done the appropriate \pm observed in media 58.38 neurons (transformation, in relationship to others authors to humans, the neurons numbers to Cebus, are minor and, hence the neural connections also are, but in qualitative analysis the occipital cortex structure of Cebus is similar to humans. The minor cell number reflects the Marin-Padilla hypothesis that is which the primate brain is intermediate between carnivores and humans to relationship the number of layers and neural connections.

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