

Histo-architectonic study of capuchin monkey parietal cortex

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The parietal cortex present cortical architecture granular-parietal in the inferior regions and granular cortex to primary and secondary sensorial areas. Neuropsychologist considers the parietal cortex like the second functional unit of Luria, responsive to receive, analysis and garner information, therefore it is very important to cognitive functions. The parietal cortex is the major region to somatic-somesthetic activity, also important to coordinates information of the body and environment, your disorganization can result gravis dysfunction of memory, sensibility and in the relationship of person with world. 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. Many aspects of the neurophysiology and human behavioral unsolved, 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 parietal 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. The Golgi-Cox method follow the phases: solution A: 5% Potassium Dichromate in distilled H₂O; 200 mL distilled H₂O + 10 g Potassium Dichromate; mix in a glass beaker using a glass rod – best to do under fume hood; solution B: 5% Mercuric Chloride (sublimite) in distilled H₂O; 200 mL distilled H₂O + 10 g Mercuric Chloride; mix in a glass beaker using a glass rod; mix solution on top of hotplate (on 5), stirring until dissolved, must be done under fume hood; solution C: 5% Solution of Potassium Chromate in distilled H₂O; 160 mL distilled H₂O + 8 g Potassium Chromate; mix in a glass beaker using a glass rod – best to do under fume hood; mix Solution A and Solution B into a 500 mL glass beaker; mix Solution C and 400 mL of distilled H₂O into a 1,000 mL + glass beaker; slowly pour the AB Solution into the C Solution while stirring continuously with a glass rod. To area of 610200 µm² 5.33), done the ± approximate was observed in media 58.53 neurons (appropriate 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 parietal cortex structure of Cebus is similar to humans. The minor cell number reflects the Marin-Padilla hypothesis that is which the primate brain, is between carnivores and humans in relationship the number of layers and neural connections.

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