Variability of the histochemistry types of rectus abdominis muscle fibers of tufted capuchin monkeys (*Cebus apella Linnaeus*, 1758)

Andreo, JC.¹, Moraes, LHR.², Rosa-Junior, GM.², Rodrigues, AC.¹, Simionato, LH.³, Bortoluci, CHF.³ and Oliveira, JA.⁴

¹Departamento de Ciências Biológicas, Universidade de São Paulo ²Pós-graduação, Departamento de Ciências Biológicas, Universidade de São Paulo ³Departamento de Ciências Biológicas, Universidade do Sagrado Coração ⁴Departamento de Ciências Biológicas, Universidade Estadual Paulista

Considering that: countless descriptions of the locomotive behavior of Cebus describe it as a very active, fast, agile and runner animal which execute giant jumps of imprudent form, which can be described as a excellent gymnast; that some primates can move both as biped and quadruped when searching for food or objects; that the rectus abdominis muscle has a long toggle arm that can play a significant role in the movement of ventroflexion of the animals and that the muscles present a histochemistry profile of fibers that respond to your functional demand. Based on the content displayed above, it was decided to accomplish a study that can answer the respective questions about the rectus abdominis muscle of the tufted capuchin monkey: Its histochemistry profile is similar to the bipeds or quadrupeds? There is variability in the distribution standard of the histochemistry fiber types (compartimentalization), allowing that some of its segments could accomplished differentiated movement?. To this work, four samples of different regions of the rectus abdominis muscle were obtained from six male adults, which were submitted to m-ATPase reaction, (alkaline and acid), NADH and H.E..The results showed: an statistically significant difference among fibers FOG and SO, in all studied regions; similarity both in frequency of the same fiber type (FG, FOG and SO) among the studied regions. Based on these data, it was concluded that the histochemistry profile of fiber of the rectus abdominis muscles of the tufted capuchin monkey it is similar neither to the bipeds nor to quadrupeds, and that this muscle does not present compartimentalization in the four studied regions.