Anatomic description of Cebus apella teeth

Lamarão, SMS.¹, Guimarães, ROB.², Lima, RR.¹, Pereira, PMM.², Maranhão, KM.¹, Santiago, LF.¹, Brigido, MC.¹, Pinheiro, MG.³, Alves Jr., S.³ and Antoniazzi, JH.⁴

¹Universidade Federal do Pará ²Universidade do Estado do Pará ³Centro Universitário do Pará ⁴Universidade de São Paulo

In South America, Cebus apella is considered as one of the primates which have the biggest size and weight. This fact justifies studies related to dentistry, having the possibility of its use in applied research, due to its phylogenetic proximity with human. The aim of this study was to accomplish in Cebus apella, an anatomic study of the permanent dentition including its external features such as: crown and root, comparing them to the features of human dentition. Two skulls of adult animals were examined (one male and one female). Cadavers from the postmortem room of the Institute of Research Evandro Chagas (Pará, Belém, Brazil) were used in this study. The skulls were cleaned from most of the soft tissues, then immersed in a mixture of equal oxygenated water and borax proportions and put on a hot source for 15 minutes with the solution in ebullition to dissolve organic tissue. After, the pieces were kept in saline solution (9%) for bone hydration. Next, all teeth were removed and photographed in sagital and lateral planes. The photographs were taken using digital camera (Coolpix 995, Nikon, Japan). Each tooth was categorized according to location within the dental arch. The anatomic descriptions were based on visual exam, observed directly through the loupe. The results showed that the teeth presented similar features to the human being, but with some peculiarities, such as: the presence of the third premolar; the roots present smaller length and volume; the apical third of the central, lateral superiors and inferior incisors are mesiodistally flat; the superior premolars have two individualized roots; the 1st and 2nd superior molars have two roots and the 3rd superior and inferior molars have just one root. The authors conclude that the Cebus apella can be used as experimental model in substitution to the humans in dental researches.

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