

Abstract

This study investigated fluctuations in hematological values of 50 wild-caught vervet monkeys (African green monkeys, grivets, *Chlorocebus aethiops*) during habituation to captivity. The monkeys were categorized into four groups according to age and sex viz adult males, adult females, juvenile males, and juvenile females. The erythrocyte values were significantly higher ($P < 0.05$) in the adult males than in the other animals. There was an increase in most of the erythrocyte parameters studied during the monitoring period with the most significant being hemoglobin, hematocrit, and mean corpuscular volume. However, the red cell distribution widths, which were higher in adult females, declined. The total white blood cell (WBC) counts, which were higher in adult females than in the other animals, were closely correlated with granulocytes counts. The WBC levels decreased in all the animals throughout the 8 months study, indicating gradually decreasing stress, but they were relatively stable in males. The platelet counts declined significantly ($P < 0.05$) and at 8 months post capture the counts were higher in females than in males. The juvenile female platelet counts were relatively stable during the monitoring period. The maintenance of the monkeys on an improved stable diet and in environment-controlled housing combined with progressing psycho-physiological adaptation may be important factors for the gradual improvements of the hematological values recorded. There were wide variations in these between individual animals emphasizing the need for long adaptation combined with establishment of individual baseline values before experimental studies. *Am. J. Primatol.* 69:1053–1063, 2007.