PHYSIOLOGIC MANIFESTATIONS OF STRESS FROM CAPTURE AND RESTRAINT OF FREE-RANGING MALE AFRICAN GREEN MONKEYS (CERCOPITHECUS AETHIOPS)

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Abstract

Adrenal gland weights, stomach mucosal lesions, and morning serum cortisol and prolactin levels were measured in 15 juvenile and adult male African green monkeys (Cercopithecus aethiops) that were shot by a hunter, euthanized after 24 hr of captivity, or euthanized after 45 days of captivity and intermittent blood sampling. Hormone levels were measured in seven additional males that had been in captivity for 7 mo. Mean serum cortisol concentrations were significantly lower in free-ranging wild monkeys at the time they were shot than in the monkeys after 1 day in captivity. Cortisol concentrations were significantly higher in wild-caught monkeys on the day after capture than they were in the same animals after 18 and 26 days of captivity. Cortisol concentrations were also significantly higher in the wild-caught monkeys 18 days after capture than in the laboratory-habituated monkeys in captivity for 7 mo. Mean prolactin concentration was significantly lower in the wild-caught monkeys on day 2 after capture, and the levels increased gradually to 45 days in captivity and was highest in monkeys that had been captive for 7 mo.

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