SINGLE INTRATESTICULAR INJECTION OF ZINC GLUCONATE AS A
CONTRACEPTIVE METHOD FOR CAPTIVE CAPUCHIN MONKEYS
(CEBUS LIBIDINOSUS)

ECS Oliveira, TGF Andrade, RG Revorêdo and F Sellos: Department of Veterinary Medicine, Federal
Rural University of Pernambuco, Recife, PE, Brazil; CCS Melo: Renorbio, Recife, PE, Brazil; AKF
Fagundes and LTB Nery: Department of Morphology and Animal Physiology, Federal Rural University
of Pernambuco, Recife, PE, Brazil; DS Souza, LCR Albuquerque and DB Siqueira: Dois Irmãos State
Park, Recife, PE, Brazil

The aim of the present study was to evaluate the efficacy of intratesticular injection of zinc gluconate
(Testoblock®) as a permanent contraception for captive capuchin monkeys (Cebus Libidinosus). Six
adult male captive capuchin monkeys (Cebus Libidinosus) were anesthetized with xylazine (0.5 mg/kg)
followed by ketamine (5.0 mg/kg) for intratesticular injection and semen collection using an
eletrejaculator. Anesthetized monkeys received a single injection of Testoblock® into each testis. The
volume of Testoblock® was based on testis width measured with a caliper. Physical examination, testis
and prostatic gland volume assessed by ultrasound, semen characteristics, and social behavior were
evaluated on Day 0 (before Testoblock® injection) and at Day 60 and Day 180 after treatment. There
was no apparent scrotal or testicular pain or tenderness, since animals did not reveal any behavioral
changes after the procedure. There was evidence of testicular atrophy based on reductions in testis
volume (46%) on Day 180 when compared to Day 0 (0.73±0.7mL and 1.33±0.69, respectively; 
P=0.044). Regarding sperm parameters, on Day 180, three capuchin monkeys were azoospermic, two
were oligospermic, and one still had viable sperm and an apparent normal sperm count. Prostatic volume
decreased 74% at Day 180 when compared to Day 0 (0.19±0.1 and 0.71 ± 0.4, respectively; P=0.092).
Social behavior was assessed by visual observation of the captive animals in their habitat at the zoo and
changes were not noted in any of the treated animals. To our knowledge, this is the first report regarding
contraception of male captive capuchin monkeys (Cebus libidinosus) by a single bilateral intratesticular
injection of zinc gluconate. This study shows the enormous potential of intratesticular injection of zinc
 gluconate for the management of a captive primate species.