

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

Andr Lab

E.C.S. OLIVEIRA¹, T.G.F. ANDRADE¹, R.G. REVORÊDO¹, C.C.S. MELO², A.K.F. FAGUNDES³, L.T.B. NERY³, F.S. COSTA¹, L.C. RAMEH-DE-ALBUQUERQUE⁴, D.S. SOUZA⁴, D.B. SIQUEIRA⁴,
¹ Federal Rural University of Pernambuco, Recife-PE, Brazil; ² Renorbio, Recife-PE, Brazil; ³ Dois Irmãos State Park, Recife-PE, Brazil

QUESTIONS

Very adapted to captive conditions at the Zoos in Brazil

Populations has become excessive; Starvation and other problems occur

Populaton control for biodiversity conservation



Semen from capuchin monkey before the chemical castration with Testoblock © (400X). Fonte: ANDRADE, 2011.

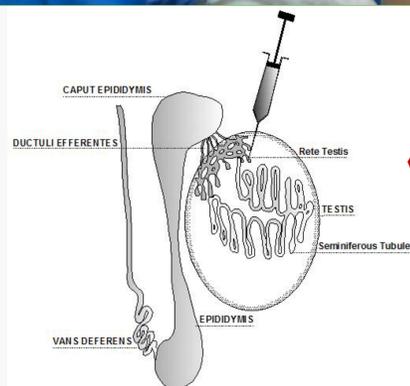
MATERIAL AND METHODS

6 monkeys

Intratesticular injection of zinc gluconate TESTOBLOCK® (1mL of solution for a 25mm testis width)

Physical evaluation, testis and prostatic gland volume, spermogram, behaviour

Evaluation at day 0 (before the procedure) and at 60, 120 and 180



RESULTS AND DISCUSSION

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 ± 0.7 mL 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.

CONCLUSION

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.

REFERENCES

- Oliveira ECS, Moura MRP, Sá MJC et al. Permanent contraception of dogs induced with intratesticular injection of a zinc gluconate-based solution. *Theriogenology*, 77:1056-63, 2012.
 Oliveira ECS, Fagundes AKF, Melo, CCS, et al. Intratesticular injection of a zinc-based solution for contraception of domestic cats: A randomized clinical trial of efficacy and safety. *The Vet Journal*, 2013