



Glandular Prostatic Hyperplasia in Felids

A clinical case in a cheetah

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History

- 10 years old male cheetah
 - Used for many matings
 - Used to detect estrus females through a corridor
- Since one year (information received after semen collection)
 - Hypoprolificity
 - Two last unsuccessful matings



Medical history

- None

Examination

- Clinical exam: no abnormality
- Scrotal – Testis – Epididymis
 - No palpation abnormality
- Penis
 - Spines present
 - No abnormality



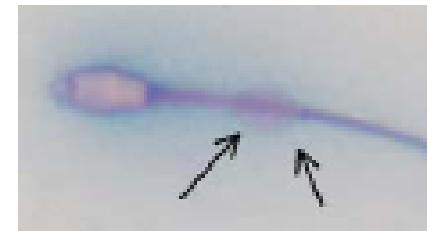
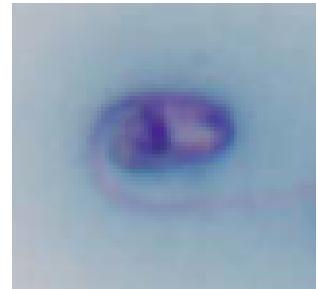
Semen collection

- **Teleaesthesiaed (Dr Pete Rogers)**
 - Dexmedetomidine (Dexdomitor®, Vetoquinol, South Africa): 40 µg/kg
 - Ketamine (Imagine®, Merial, South Africa): 2,5 mg/kg.
- Bladder emptied and then rinsed several times using M199® cell medium (Sigma-Aldrich, country).
- **Electroejaculation procedure**
 - standard electrostimulator (P and T Electronics, USA) with a 20 cm bipolar rectal probe with 3 longitudinal electrodes.
 - 2 x 30 stimulations: 10 at 2 volts, 10 at 2 volts, 10 at 3 volts (5 min. apart each series)
 - 20 stimulations: 10 at 3 volts, 10 at 4 volts



Semen analysis

- Spermatozoides count: Thomas chamber
 - Morphology: Spermac® - RAL 5-5-5®
 - Motility: reproduction specialist
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- Total volume = 3.8 mL
 - pH 8 (PH-meter)
 - Total number of spermatozoa < 20 million
 - Motility 0
 - Sperm defects = 85%
 - mainly coiled tail and distal droplets
 - No hematospermia has been observed.

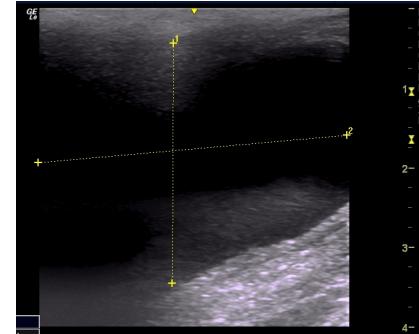


Zambelli 2006

Uro-genital Ultrasound

- **Prostate gland**
 - symmetrical lobes
 - margins of the gland were differentiated from the surrounding tissues
 - diffusely discrete inhomogenic
 - numerous intraparenchymal cavities of varying size (< 7 mm, anechoic, and a no apparent wall).
 - prostate gland was into the abdomen and not the pelvis.
- **Testes – epididymitis:** No abnormality*
- **Lymph nodes:** no abnormality
- **Bladder:** no abnormality

* Low sensitivity



Male BPH



Normal BPH

Diagnosis hypothesis (1)

- Glandular prostatic hyperplasia
 - Complication of Benign Prostatic Hyperplasia
- Leading to Epididymitis and/or ejaculate alteration
 - Reduce sperm output
 - Asthenozoospermia
 - Secondary defect teratozoospermia

Lévy X, Nizanski W, et al. *Diagnosis of Common Prostatic Conditions in Dogs: an Update* Reprod Dom Anim, 2014: 49 (Suppl. 2), 50–57.

Discussion

- BPH not describe in felid species
- Maybe a concern in breeding program: zoos, etc.
- How to easily diagnose it
 - CPSE interest ?
- How to prevent fertility consequences
 - Breeding procedure
 - Medical treatment interest ?
 - Need to be evaluated in cats



Acknowledgements

