

STUDENT CLINICAL CASE SESSION

Electroejaculation and breeding soundness examination on a clouded leopard

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In previous studies with clouded leopard electroejaculation, a variety of techniques have been performed, from varying probe sizes to varying stimulation procedures.¹⁻⁵ In 2018, the Smithsonian Conservation Biology Institute released a felid semen collection, evaluation, and freezing procedure that can be used in clouded leopards. This procedure uses a 1.6 or a 1.9 cm probe.¹ However, in this case, we used a 10 - 12 cm probe with 2 electrodes. This probe is commonly used in small ruminants, and therefore, more widely available to veterinarians than a probe specifically used for wild felids. The purpose of using the Pulsator IV electro-ejaculator with a ram probe was to determine if a more widely available probe could be used to collect semen from a clouded leopard or other species of similar anatomic size. A 3-year-old, intact male clouded leopard (*Neofelis nebulosa*) from the Nashville Zoo was presented to the University of Tennessee College of Veterinary Medicine Theriogenology service for a breeding soundness examination. On physical and reproductive ultrasonographic examinations, the clouded leopard appeared healthy with no physical abnormalities aside from an abnormally small left testis. Semen was collected with the Pulsator IV electro-ejaculator with a ram probe which is commonly used to collect semen in small ruminants. Approximately 0.2 - 0.3 ml of semen was collected using said device during this procedure. Collected semen was then examined for motility and morphology to determine the viability of the leopard's semen. Semen was determined to have 40% motility and 66% normal morphology. Thus, the breeding soundness exam concluded this leopard had viable semen and a good chance to impregnate a female, and that the Pulsator IV electro-ejaculator with a ram probe can be used to collect semen sample for evaluation in clouded leopards.

Keywords: Electroejaculator, ram probe, clouded leopard

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Preputial prolapse and injury in a brahman bull

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A 3-year-old brahman, bull presented with preputial prolapse secondary to multiple preputial injuries. Extensive swelling and edema engorged the prepuce in its entirety, with necrotic debris present along the ventral and left lateral aspects. The necrotic tissue was debrided and the prepuce was scrubbed with betadine before placing a pessary tube. Medical grade honey and pterocillin were applied to the edematous preputial tissue with appropriate bandaging to hold the tube in place and promote reduction of edema. A support sling was applied, along with daily osmotic and hydrotherapy for prolapse reduction. Numerous tissue defects were allowed to heal by second intention before a reefing procedure was performed. *Bos indicus* bulls have a pendulous sheath, redundant preputial tissue, enlarged preputial orifices, and lack retractor prepuce muscles in homozygous polled bovids, predisposing them to preputial prolapse and injury.^{1,2} Most preputial injuries occur at the ejaculatory lunge when epithelial and underlying elastic tissues of the bunched prepuce are damaged due to compressive forces between the bull's abdomen and the female's pelvis.¹ These tissue disruptions lead to edema, inflammation, further prolapse of preputial tissues, subsequent injury and fibrotic scar formation upon healing.^{1,2} Whereas medical management is sufficient for returning tissues to the preputial cavity, surgical intervention is paramount for returning to breeding function.^{1,4} A reefing (circumcision) procedure facilitates full extension of the penis and