

Onychetomy of a captive male Indian leopard (*Panthera pardus*)

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Abstract

Onychetomy is the surgical removal of claw. A male adult captive leopard aged around 14 years showed limping, abnormal gait and oozing of discharges from the left front paw region. With an estimated body weight of 65 kg, leopard was subjected to immobilization with Medetomidine – Ketamine (as Ketamine hydrochloride) combination @ 0.07 mg/kg and 3 mg/kg respectively. Physical examination revealed a maggot wound on its left forepaw around the overgrown medial claw which was inflicted due to onychocryptosis. Standard maggot wound dressing procedure was carried out. The eroded tissue surrounding the medial claw made it vulnerable to abrasion and cracks and it was decided to extract the affected claw by excisional method. Sutured with polyglycolic acid absorbable suture (3-0) in simple interrupted pattern leaving a small gap for the draining of fluids. Administered 1.5ml Doramectin (Dectomax 1%) injection intramuscularly, single shot 5ml Enrofloxacin and 6.5ml Tolfenamic acid subcutaneously. Topical application of exoheal spray (herbal) was continued for 10 days. Animal gained normal gait and activity within two weeks and made an uneventful recovery.

Key words: Captive leopard, Onychetomy, Medetomidine, Ketamine, Onychocryptosis.

Introduction

Onychetomy is the surgical removal of claws. In captivity large felines often suffer from claw problems as they are subjected to overgrowth and can interfere with retraction and normal

functioning of claw. (Fowler, 1999) (Prater, 2005)

This case report describes onychocryptotic (ingrown claw) medial claw in left forepaw of a male adult captive leopard which inflicted a maggot wound and its successful treatment and management by onychetomy.

Materials and methods

A male adult leopard aged 14 years under captivity at Mini Zoo, Bellary, Karnataka was showing symptoms of limping, abnormal gait and oozing of discharges from the left front paw region. With an estimated body weight of 65 kg, leopard was subjected to immobilization with medetomidine (Medetor, 1 mg/ml, Chanella) – ketamine (Ketamil 100 mg/ml, Troy Laboratories Pty Limited, Australia) combination @ 0.07 mg/kg and 3 mg/kg respectively in a single dart injection by distant projectile (Dan Inject – no:9124MOD JM). (Fig.1)



Fig.1 Animal after darting

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Physical examination revealed a maggot wound on it's left forepaw around the overgrown medial claw inflicted by onychocryptosis (ingrown claws shown in Fig 2).



Fig.2 Onychocryptotic medial claw with myiasis

Standard maggot wound dressing procedure was carried out with turpentine oil and povidone iodine.

The eroded tissue surrounding the claw made it vulnerable to abrasions and cracks and it was decided to do surgical removal of affected medial claw of the same paw. Incisions were made posteriorly to reach past unguial crest, severed the tendon and ligament to disarticulate the claw. The claw was carefully removed with ease since the tissue surrounding it was partially fed by maggots. (Fig 3).



Fig.3 Onychetomy

The wound area was closed with polyglycolic acid absorbable suture (3-0) in simple interrupted pattern leaving a small gap for draining of fluids. (Fig 4)



Fig.4 Wound suturing

Administered 1.5ml doramectin intramuscularly (Dectomax 1% injection, Pfizer), single shot 5ml enrofloxacin (Flobacc SA 10% injection, Intas Pharmaceuticals) and 6.5ml Tolfenamic acid (Maxxtol 40mg/ml, Intas Pharmaceuticals) subcutaneously for aiding the healing process. Topical application of exoheal (Herbal spray of Intas Pharmaceuticals Ltd, India) spray was continued for 10 days.

Result and discussion

Wound healed completely and the animal gained normal gait and activity within two weeks. The claws of carnivores are highly specialized nails used in food gathering, climbing and defence. The third phalanx is flattened from side to side and the nail is wrapped around the top and sides of the bone. Ungual crest of distal phalanx is a peculiar feature of claw which arises from the base of distal phalanx and envelopes the proximal end of the horny shell. The claw grows both linearly from proliferation of horn at the unguial process and in thickness from the stratum germinativum on the inner surface of the horny claw and result in laminar structure in an overgrown claw.



Fig.5 Dressed wound after the procedure

It can be concluded that some facilities for nail scratching should be provided for large felines under captivity or regular nail trimming should be carried out to avoid claw problems. Certain facilities like strata, wooden poles should be provided to them to exhibit normal behaviour and can also act a hiding place and complete concrete flooring should be avoided.

References

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