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CASE REPORT

Surgical Management of Cloacal Prolapse in Indian Rock Python

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Abstract

A two year old male Indian Rock Python weighing 14kgs from Guindy Snake Park, Chennai was referred to Madras Veterinary College Teaching Hospital with the history of prolapsed cloaca since two days. Clinical examination of prolapsed mass was inflammed, haemorrhagic, edematous and soiled. Hard feces found in cloacal region. Cloacal patency was maintained and circumcostalcloacopexy was performed anterior to the cloaca using PGA 2-0 under general anaesthesia. Animal had an uneventful recovery.

Keywords: Cloacal prolapse, Circumcostalcloacopexy, Indian rock python.

1. Introduction

Pythons are non-venomous snakes of Boa and python family. They are large, muscular and ectothermic (cold-blooded) animals that ambushes and kill their prey by means of constriction or squeezing. Generally python snakes are found in tropical and subtropical Asia, Africa and Australia (Ayers and Shine, 1997). Cloaca is a passage used for eliminating faecal, urinary and reproductive discharges.

Eversion of cloaca through the vent is called as cloacal prolapse. Cloaca is separated from the large intestine by considerable width and exits close to the caudolateral margin of the vent (Simpson, 2010). Cloacal glands are usually present in snakes and serves as a defense mechanism by producing copious odoriferous secretions and as a trail marker during reproductive behaviour. The present case discusses the successful surgical management (cloacopexy) of cloacal prolapse in a python.

2. Case History and Clinical Observations

A two year old male Indian Rock Python weighing 14kgs from Guindy Snake Park, Chennai was referred to Madras Veterinary College Teaching Hospital with the history of protruding mass through cloacae (Fig 1) since two days was subjected for surgical intervention.

Clinical examination of prolapsed mass was inflammed, haemorrhagic, edematous and soiled. Hard feces found in cloacal region (Fig 2).

3. Treatment

The python was anaesthetized with ketamine hydrochloride anaesthesia (Fig 3) at 25mg/kg body weight (Justin *et al.*, 2011). The python was intubated with endotracheal tube size 2. Anaesthesia was maintained with 2% Isoflurane (Fig 4). The python was kept in a dorsal recumbency and prolapsed mass was cleaned with chlorhexidine solution. Circumcostalcloacopexy was performed anterior to the cloacae through the musculature of the body wall, incorporating a rib within the pexy on the lateral aspect using PGA 2-0 (Fig 5) in a continuous pattern and by simultaneously maintaining the cloacae patency by placing a 10 ml sterile syringe inside the vent (Fig 6) (Martinez-Jimenez and Hernandez-Divers, 2007; Sykes, 2010). Post-operative antibiotics and analgesics were administered. No intra or post-recovery complications.

Fig 1: Python showing cloacal prolapse.

Fig 2: Image showing inflammed, haemorrhagic, edematous and soiled prolapsed mass and presence of hard feces in the cloaca.

Fig 3: Induction of anaesthesia in Indian rock python.

Fig 4: Endotracheal intubation followed by gaseous anaesthesia.

Fig 5: Circumcostalcloacopexy performed.

Fig 6: Maintaining of cloacal patency by placing 10ml syringe inside the vent.

4. Discussion

In the above case communicates the Indian rock python with a history of cloacal prolapse in captivity and it may be due to increased abdominal pressure or increased peristalsis, unusual weather conditioning and predisposing factors like neurological dysfunction, excessive libido (Jayathangaraj *et al.,* 2007; Kik *et al.,* 2011). The cause of a prolapse of the cloacae is intrinsic to the organ itself or paralysis of the pelvic floor sphincter complex or a loosening of the suspending ligaments. For the development of a prolapse there might be a break in calibre between the very tight pelvic colon and the wide rectal reservoir (Hedley and Eatwell, 2014; Leash, 1977). Circumcostalcloacopexy can be performed to prevent recurrence (Bodri and Sadanaga, 1991).

5. Conclusion

Cloacal prolapse can be successfully managed by circumcostalcloacopexy in a python. Circumcostalcloacopexy prevents the recurrence. Deworming should be performing regularly. The prolapsed animal should be kept in warm and protect it from direct heat sources and the prolapsed mass should be moist, clean and protect from trauma by cage-mates.

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