

SURGICAL MANAGEMENT OF CROP FISTULA IN AFRICAN GREY PARROT

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Abstract: Crop fistula is a common ailment in Psittacine birds which might be due to accident, chronic irritation and feeding of hot food by owners. An one year old African grey parrot was presented at the Avian and Exotic Pet Unit, TVCC, MVC, Chennai, with a history of oozed out of food material from the crop region for the past two days. Physical examination revealed, crop fistula was opened and crop contents coming out through the opening. The wound was noticed in the right neck region and pain evinced on palpation. The wound was cleaned with Povidone Iodine. Surgery was performed under gaseous (Isoflourane) anesthesia for suturing the crop using synthetic suture material PGA 2.0 by continuous pattern and skin was closed with interrupted pattern. The bird had a good recovery after the procedure and metrogel ointment was prescribed for applying over the sutured skin, Tablet Enrofloxacin at the dose rate 10-15mg/kg body weight and Inj. Meloxicam was administered intramuscularly at the dose rate of 0.2mg/kg body weight. The bird showed uneventful recovery after 15 days.

Keywords: African grey parrot, crop fistula, PGA, anesthesia.

Introduction

History

An African Grey Parrot (*Psittacus erithacus*) of one year old was presented at Avian and Exotic Pet unit, Madras Veterinary College, Chennai with a history of wound in crop and crop contents oozed out from the fistula for the past two days. The African grey parrot was fed with commercial feed formula that the owner was heated before feeding.

Physical Examination

On presentation, the African grey parrot was looking active and alert, good appetite with standing posture. The crop contents oozed out from the fistula and wound was noticed. Pain evinced on palpation was noticed. Serous discharge noticed from the crop. Fistula present on right side of ventrocaudal region.

Clinical signs

- Hyperemia, desquamation and pain.

- Damaged tissue with crop contents oozed out and serous discharge noticed.
- Shock noticed in the bird with mild burns, loss of appetite and showed severe dehydration from loss of fluids.

Diagnosis

- Based on history and clinical signs.
- Physical examination revealed the involvement of other organs.

Surgical Treatment

Anesthesia: Under isoflurane gaseous anesthesia (Fig.1), 5% mask induction and 2% maintenance with surgical procedure was carried out. The oxygen flow rate of 1.5 l/minute was maintained. The duration of induction was 6 minutes, maintenance 20 minutes and recovery was noticed after 4 minutes of withdrawal of gaseous anaesthesia.

Suture technique: The bird was placed ventro-dorsally, feathers were clipped around the crop wound. The crop fistula was surgically repaired by debriding the edges of the fistula, separating the crop and skin. The crop was sutured using synthetic PGA 2.0 (Poly Glycolic Acid) by continuous pattern and skin was closed with interrupted pattern with aseptically.

Recovery: After anesthesia, the bird was showed uneventful recovery within 4 minutes.

Supportive and Medical treatment

Povidone iodine ointment was applied over the sutured site. Oral rehydration was performed and the owner advised to continue the oral fluid therapy. Ointment. Metrogel-one tube, topical use for one week, Tab. Enrofloxacin- @ dose rate of 10mg/kg body weight by orally for three days, For analgesia Inj. Meloxicam administered by intramuscularly @ dose rate of 0.2mg/kg body weight and mineral supplement -5 drops/day orally were prescribed.

Case Discussion

Crop fistulation in birds due to sharp iron object (Phaneendra and Saibaba, 2015), crop injuries in birds by animal bites, foreign body ingestion, feeding excessively hot food grains, chronic irritations etc., (Harrison, 1987), foreign body penetration causing crop injury in a pigeon (Basha *et al.*, 2010) . Trimming of the necrosed edges of the structure before its repair was advised by Bennett and Harrison (1994) in oesophageal perforations and Coles (2008) in fistulation of crop. Early presentation and appropriate surgical reconstruction of oesophagus ensured a good recovery in the present case without any postoperative complications.

Conclusion

- A successful anesthesia and suitable surgical suture technique for management of crop fistulation in African grey parrot was carried out.

- When the burn is scabbed over and a fistula has formed, surgical correction should be considered.
- Most of the burns that have occurred in juvenile birds, because of owners fed the bird by misguidance.
- Regular dressing of the sutured area of skin was done up to 8th postoperative day by which time, complete healing of skin wound was noticed. Postoperative complications were not seen in an observation period of six months.

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Fig.1 Isoflurane Gaseous Anesthesia for African Grey Parrot



Fig.2 Synthetic suture material PGA 2.0 (Poly Glycolic Acid) was used for crop fistulation



Fig.3 Skin was closed by interrupted suture technique

