

# Protocol- Management of Raptors with a Ruptured Crop

## Intake Exam & Care:

- After assessing the bird's mentation, place the bird under general anesthesia via isoflurane inhalation delivered by facemask.
- Record the bird's body weight and perform a comprehensive examination, including evaluation of the bird's body condition, ocular health, and for other signs of trauma.
- Crop wound care:
  - Remove food material from the crop, subcutaneous space, and skin.
  - Carefully pluck feathers around the open crop wound.
  - Gently clean the wound with dilute chlorohexidine and saline.
  - Cover the wound with a hydrogel dressing and a Tegaderm dressing.
- Administer subcutaneous (SC) fluids and perform other routine intake procedures.
- Start antibiotic therapy: amoxicillin-clavulanate PO BID
- Start analgesic therapy: meloxicam (first dose SC, then PO) BID and gabapentin PO BID
- Oral medications are administered via a red rubber catheter passed to the bird's proventriculus; make sure to flush the catheter with warm water to ensure that the entire dose of medication is delivered.

## Pre-Surgical Management:

- The crop injury is managed as an open wound for 3-5 days before surgical closure to allow for patient stabilization and easier identification and debridement of non-viable tissue at the time of surgery.
- Crop wound care:
  - Change the wound dressing every 24-48 hours, with the bird under general anesthesia.
    - Highly contaminated or effusive wounds will require daily dressing changes.
  - Gently clean the wound with dilute chlorohexidine and saline.
  - Cut the hydrogel dressing to size so that it fully covers the crop and only a small amount of surrounding skin at the margins of the wound (excessive hydrogel contacting the skin increases the risk for secondary fungal dermatitis).
  - Also apply clotrimazole cream to the surrounding skin to further prevent secondary fungal dermatitis.
- Hydration support: repeat subcutaneous fluid administration as indicated
- Nutritional support:
  - Gavage feed
  - Feeding frequency: BID (TID if the bird is thin or losing weight)
  - Diet: Oxbow or EmerAid Carnivore Care
  - Amount: 5% of body weight in volume per feeding
  - Use a red rubber catheter and pass it all the way down into the proventriculus. If the catheter gets caught up at the thoracic inlet on the coracoid bones, try directing the tube more dorsally, which will typically allow the tube to pass.
  - Oral medications are also administered via the red rubber catheter; make sure to flush the catheter with either food or warm water to ensure that the entire dose of medication is delivered.
- Continue antibiotic therapy: amoxicillin-clavulanate PO BID
- Continue analgesic therapy: meloxicam PO BID and gabapentin PO BID

## Post-Surgical Management:

- Cover the suture line with a non-adherent (e.g., Telfa) pad and a Tegaderm dressing for the first 24-48 hours following surgery.
- Nutritional support:

Days Post-Op.	Feeding Frequency	Diet
<b>0-3</b>	TID; free or hand feed	Clean meat only (i.e., no fur or bones), cut into bite-sized pieces; smaller/more frequent meals decrease the amount of pressure placed on the healing crop
<b>4-10</b>	BID; free or hand feed	Skinned cut up food only (i.e., no fur; bones are OK)
<b>10+ *</b>	BID to SID; free or hand feed	Whole food

*\*If the crop wound was very large, delay this step until 14 days post-op.*

- Continue antibiotic therapy (amoxicillin-clavulanate PO BID) until the surgical wound is well healed, typically 2-3 weeks post-op.
- Continue analgesic therapy:
  - Gabapentin for an additional 7-10 days post-op.
  - Meloxicam for an additional 10-14 days post-op.
- At 2-3 weeks post-op:
  - Remove the skin sutures.
  - Start reconditioning the bird for release.

### Sources

- Scott, David. Raptor Medicine, Surgery, and Rehabilitation, 3<sup>rd</sup> Edition. 2020.
- The Raptor Center- University of Minnesota College of Veterinary Medicine.