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CASE REPORT

Uterine Prolapse in A Cockatiel Related to Chronic Egg Laying

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Summary

A 6 years old cockatiel that laid three eggs in two consecutive days was admitted to the clinic with the complaint of bleeding from the cloaca generate this case. A necrotic tissue that was hanging out and shattered by the cockatiel was noticed in the examination. The prolapsed tissue was determined as uterus (shell gland). The necrotic part of the uterus was excised and it was replaced to normal position. The cloacal opening was sutured. For postoperative care an antibiotic was prescribed for a week. At the last examination one week after the operation no abnormality was detected in the cockatiel and the sutures at the cloaca were removed. In conclusion, it is indicated that such cases can be treated by operatively.

Keywords: *Cockatiel, Prolapse of Uterus, Surgical approach*

Bir Kokatiel'de Kronik Yumurtlamaya Bağlı Prolapsus Uteri

Özet

Olgumuzu iki gün üst üste, üç kez yumurtladığı ve son yumurtlamasından sonra kloakasında kanama olduğu şikayeti ile getirilen 6 yaşlı kokatiel oluşturdu. Yapılan muayene sonucu dışarı doğru sarkan dokunun bir kısmının nekroze olduğu ve kokatiel tarafından parçalandığı belirlendi. Prolabe dokunun uterus (shell gland) olduğu tespit edildi. Uterusun nekroze kısımları ekstirpe edilerek dikildi ve uterus yerine reddedildi. Kloaka ağzına da dikiş uygulandı. Ameliyat sonrası bir hafta boyunca kokatiel'e antibiyotik reçete edildi. Kokatiel'in ameliyattan bir hafta sonraki son muayenesinde herhangi bir anormallik tespit edilmedi ve kloakadaki dikişler alındı. Sonuç olarak, bu tarz olguların ameliyatla tedavi edilebileceği gösterildi.

Anahtar sözcükler: *Kokatiel, Prolapsus uteri, Cerrahi yaklaşım*

INTRODUCTION

Chronic egg laying is a common condition in female birds frequently in parekeets, cockatiels, budgerigars, finches, lovebirds [1-3]. Normally birds lay egg no more than 2 to 3 clutches per year. When a bird have multiple clutches per year as once monthly or every two months [3] and repeated clutches or repeated larger-than- normal clutch sizes not existing an avian mate or at an inappropriate season, it is considered as chronic egg layings [3,4]. Chronic egg laying is a serious metabolic drain for reproductive tract that leads imbalances in calcium stores which leads to osteoporosis, yolk peritonitis and egg-binding [1,2]. Increased photoperiod, food type, availability, the presence of a mate, human cohabitant, cage furniture and toys also another bird that is housed in the same room or cage, even hearing of male bird can all stimulate fertility [1]. Predisposing factors that cause chronic egg layings in birds are unbalanced diet, psychogenic factors, genetic problems, insufficient environment, altering in hormonal balance [2].

Prolapse of the oviduct, uterus, vagina and/or cloaca may occur secondarily to any condition that causes excessive abdominal straining as normal physiologic hyperplasia, normal egg laying, as a result of dystocia, various diseases that effect these tissues, general debilitation and malnutrition [1,4,5].

The uterus protrudes especially with a partial prolapse of the cloaca and vagina through the oviduct [1].

Irrigation, careful cleaning and lubrication of prolapsed

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tissue are necessary for treating the condition [1]. Prolapsed tissues must be treated immediately. Surgery is needed when the oviduct is necrotic and/or when the egg can not passed medically or on its own [6]. Prolapsed tissues are susceptible to infection and injury, they should be flushed with sterile saline solutions and moistened tissues must be gently replace to normal position with a lubricated swab. Transcloacal sutures can be placed on either side of the vent to avoid the recurrence [4,6]. Also a hole should be left for maintaining an exit for urine, urates and faeces [4]. Broad spectrum antibiotics should be administered while bacterial cultures are pending [1].

The purpose of this paper is to report the treatment of the prolapsed uteri in a cockatiel.

CASE HISTORY

A 6 years old cockatiel that was admitted to the clinic with the complaint of bleeding generate this case. The bird is fed seed based diets. Generally the bird lays egg once in a month and forms two eggs in her each layings. The owner defined that cockatiel laid egg for 3 times at two consecutive days. At the first day the bird laid two eggs and next day the bird laid one more egg too. After the last laying egg, at night the owner noticed the bleeding at the rear side of the bird and in the morning the owner brought the bird to our clinic for the examination. The owner defined that all the laid eggs were calcified. Also there was no male bird in the cage. In the examination, the bird's general condition was detected good and a prolapsed tissue was noticed at the moment. After the examination the tissue was diagnosed as uterine prolapse *(Fig. 1)* also radyographic examination revealed that there was no egg visualized via the cloaca and it was decided to operate the bird to treat the condition. Consequently, the cockatiel underwent inhalation anesthesia by using 2% isoflurane (Forane liquid®, Abbott, Turkey) by mask. During the operation the patient's heart rate was continously monitored when the hearth rate decreased, the anesthesia was suspended and given oxygen to the patient. Oxytocin (1 unit/kg, Oksitosin; Vetaş, Turkey) was administered to the prolapsed tissue and uterine canal opening by a swap in order to reduce the mass *(Fig. 2)*. Also the tissue was regularly flushed with 20 ml serum physiologic and 1 flacon crystal penicilline (Kristapen flk, Deva, Turkey) combination. The canal opening lubricated by a swab to avoid laceration. The necrotic tissue was dissected and 5/0 vicryl was used to suture the mouth of the canal opening by simple split suturing. After the suturing, the rest of the healthy tissue removed with a cotton swab by gentle inward pressure and the prolapsed tissue was normally positioned. The cloaca was sutured by purse-string suture



Fig 1. Uterine prolapse in the cockatiel
Şekil 1. Kokatiel'de prolapsus uteri



Fig 2. The condition was covered up with the operation performed to the cockatiel
Şekil 2. Kokatiel'e uygulanan ameliyatla problem ortadan kaldırıldı



Fig 3. The condition of the cockatiel at the end of the 7th day after the operation
Şekil 3. Ameliyat sonrası 7.günün sonunda kokatiel'in durumu

to reduce the cloacal opening with 5/0 polyglactin 910 (Vicryl®) to avoid the recurrence of the prolapsus. An elizabethan collar was placed around the bird's neck for the protection of the access to the sutures. For postoperative care an antibiotic (Baytril, 2.5% liquid®, Bayer, Turkey) to the bird's water supply (0.5 cc/2 L water) was prescribed for a week. The sutures were removed one week later *(Fig. 3)*. The owner defined there was no problem at the defecation and in general condition of the cockatiel after the operation.

DISCUSSION

According to the owner's information, this bird lays egg monthly and has two clutches in her each layings. So it was decided that it was a chronic egg laying in line with Hadley [3]. An egg can be seen within the prolapsed uterine tissue [7]. In this case, there was not an egg in the uterus during the radiographic examination.

Many cases require surgery to resolve the condition under general anesthesia. The prolapsed tissue should be cleaned with dilute chlorhexidine solution and rinsed with saline [3]. This bird was operated to purify the necrotic tissues and to handle the problem but before operation the tissues were cleaned with warm saline solution and crystal penicilline combination. An Elizabethan collar was placed to avoid the bird from operation side as Hadley reported [3].

Prolapse of uterus may occur to egg binding or in conjunction with cloacal prolapse [7]. In this case prolapse of uterus was formed as a result of chronic egg laying.

The prolapsed tissue can be replaced using a gloved finger or sterile swab [7]. In this case the prolapsed tissues were replaced with a sterile swab.

In conclusion it is demonstrated that prolapse of uterus can be successfully treated surgically under general anesthesia in cockatiels.

REFERENCES

1. Bowles HL: Reproductive diseases of pet bird species. *Vet Clin Exot Anim*, 5, 489-506, 2002.

2. Crosta L, Gerlach H, Bürkle HM, Timossi L: Physiology, diagnosis, and diseases of the avian reproductive tract. *Vet Clin Exot Anim*, 6, 57-83, 2003.

3. Hadley TL. Management of common psittacine reproductive disorders in clinical practice. *Vet Clin Exot Anim*, 13, 429-438, 2010.

4. Romagnano A. Reproduction and paediatrics. **In,** Harcourt-Brown N, Chitty J (Eds): BSAVA Manual of Psittacine Birds. 2nd ed., pp. 222-233, Blackwell, Iowa, USA, 2005.

5. Horton S. The Reproductive Female. www.avianeducationandresource center.org/CareOfOverlyReproFemaleBird.pdf, *Accessed*: 24.04.2011.

6. Echols MS: Surgery of the avian reproductive tract. *Semin Avian Exotic Pet*, 11 (4): 177-195, 2002.

7. Harrison GJ, Lightfoot TL, Flinchum GB. Emergency and critical care. **In,** Harrison GJ, Lightfoot TL (Eds): Clinical Avian Medicine. Vol. I, Chapter 7, pp. 213-232, Spix Publishing, Palm Beach, USA, 2006.