



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2023; SP-12(7): 206-207
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www.thepharmajournal.com
Received: 21-05-2023
Accepted: 25-06-2023

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Management of egg bound condition in budgerigar: A case report

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Abstract

A 6-month-old parakeet presented difficulty in laying eggs and showed severe straining with mucus discharge from the cloacae. A manual attempt for the removal of the egg failed. Episiotomy was performed for the removal of the egg. The bird fully recovered without any further complications.

Keywords: Parakeet, egg bound, episiotomy

Introduction

Egg bound is a condition that is commonly seen in young birds following difficulty in laying eggs wherein the eggs get lodged in the vent region (Crespo and Shivaprasad, 2003) ^[1]. The condition can occur due to several factors, but it is commonly observed in young birds which have started laying. This condition could also be termed the dystocia of a bird. Individual bird variation is recorded due to age (very young and very old), body score condition (malnutrition and overweight), excessive egg production, restricted movements of the birds (lack of exercise), adverse environmental changes (extreme cold and hot), provision of insufficient water or feed, passing of malformed eggs and improperly positioned eggs, concurrent systemic illness and hypothermia (Anne and Girl, 2006) ^[2]. Egg binding conditions can be managed by manually expelling the egg or by surgical removal of the egg.

History and Clinical Examination

A 6-month-old budgie was presented to the Department of Veterinary Surgery and Radiology, CVSc & AH, OUAT, Bhubaneswar with a history of caudal abdomen swelling for the past one day. On physical examination it is revealed that there is a lodgement of the egg at the terminal part of the oviduct (Fig.1). The bird appeared dull and depressed. A radiological examination was done for confirmation and found one egg was strangulated in the oviduct (Fig.2).

Treatment and Results

The bird was anesthetized with 2 mg ketamine hydrochloride intramuscularly (Gandomani *et al.*, 2011) ^[3]. Then the cloaca was washed with normal saline to remove the dirt and debris. The lubricant was applied to the cloaca mucosa to enable manipulation. But because of the bigger size of the egg, a manual attempt to the removal of egg was failed. Therefore, it was decided to attempt episiotomy. The vent region was prepared for asepsis by painting the area with povidone-iodine. The slight incision was made on the ventral portion of the cloaca and the egg was carefully removed by gentle manipulation. Thereafter skin was apposed following a simple interrupted suture with polyamide 2-0. Postoperatively the bird was maintained on antibiotics and supportive therapy for five days. The bird recovered uneventfully with no complications.

Discussion

Egg bound condition was common in young female birds at starting stage of laying period (Charlton, 2006) ^[4]. According to Harrisson (1986) ^[5], salpingitis, atony or paralyse of the oviduct are the main causes for the occurrence of egg bound in birds. In the present case, the condition occurs due to large size of egg. That is why episiotomy had to be done. Crespo and Shivaprasad (2003) ^[1] also reported that large sized egg can be another causative reason for the development of this condition. Manual removal of the egg after proper lubrication and careful physical manipulation can resolve the condition (Joy and Divya, 2014) ^[6]. Manual expulsion of the egg can be succeeding by concurrent administration of calcium gluconate (5-10 mg/kg

body weight, IM) for every 4 hours, oral supplementation of highly digestible sugar supplements, oxytocin (3-5 IU/kg body weight IM) and topical intra-cloacal administration of prostaglandin E2 (0.02-0.1mg/Kg body weight) gel (Harrison and Lightfoot, 2006; De Matos and Morrissey, 2005) [7, 8]. If the egg bound condition was left untreated there is a possibility of prolapse of the oviduct which is considered as one of the most common complication and stressful condition (Saif, 2008; Das *et al.*, 2015; Sahu *et al.*, 2019; Satapathy *et al.*, 2022) [9, 10, 11, 12]. In the present condition no such complications were observed.



Fig 1: Lodgement of egg at the vent region



Fig 2: Ventro-dorsal view showing strangulated large sized egg

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