Egg Bound Condition a Critical Condition in an Indian Parrot - A Case Report

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Abstract
An one and half year old Parrot, weighing 150gm with a history of reduced activity and anorexia for the past two days. The parrot showed reluctant to perch, tenesmus, labored respiration, persistent tail wagging and absence of defecation. On physical examination an egg was stuck far inside/near the cloaca and the egg was successfully removed manually through cloaca.

Keywords: Egg binding, Parrot, Manual manipulation method.

1. Introduction
Failure of an egg to pass through the oviduct within a normal period of time is termed as egg bound condition. It is a serious obstetric complications and sometimes life threatening that affects female birds of breeding age (Laila, 2016) and more severe in small size birds (Pollock, 2002). In healthy birds after 24 to 26 hours ovulation, egg will form and lay and in general eggs are laid 48 hours apart (Johnson, 2015). In female birds follicles are mainly stay in the uterine part the egg shell formation takes place (Anthony, 2016). Egg binding is multifactorial disease condition and it’s hard to determine the exact cause of egg-binding. It may be due to oviductal muscle dysfunction, vitamin and mineral deficiencies (specially Ca deficiency or low Ca absorption), low protein diets, any systemic disease or shock, stress from the environment, species predilection, damage to the oviduct or may be due to obese and a sedentary lifestyle of birds. Birds which are laying egg first time are more prone to egg binding or dystocia (Bowles, 2006). If egg binding condition is not treated than it may cause granuloma formation, uterine impaction, extra-uterine eggs, and lastly death of birds may occurs. The cases of egg bound syndrome were reported by Joy and Divya (2014) in Chicken, Saranya et al (2017) in Cockatiel and Reddy and Sivajothi (2018) in Budgerigar. In this report successful manual management of egg bound condition in an Indian Parrot was reported.

2. Case History and Clinical Examination
A Parrot of one and half years age, weighing 150gm was presented to Department of Veterinary Gynaecology and Obstetrics, teaching Veterinary and Clinical Complex, College of Veterinary and Animal Science, Bikaner, with history of reduced activity, anorexia for the past two days. On physical examination the affected birds’ showed an egg was stuck far inside or near the cloaca (Fig 1). The parrot showed reluctant to perch, tenesmus, labored respiration, persistent tail wagging and absence of defecation.

3. Treatment and Discussion
Liquid paraffin was infused inside cloacal membrane and punctured the egg with needle and the retained egg was successfully removed manually through cloaca (Fig 2). After removal of egg the bird was treated with Inj. Meloxicum 0.5-1mg/Kg I/M once, Tab. Enerocrin (Pfizer) 15 mg for 3 days and Drops Verol (Pfizer) 2-3 drops BD for 7 days. Following the removal of egg, reduction in tenesmus was noticed. The bird took feed normally from subsequent days. Egg bound syndrome is a life threatening situation in which birds are unable to pass the egg through the reproductive tract. Female birds which are not exposed to a mate are more prone to egg bound condition (Harrison and Lightfoot, 2006). Deficiency of the vitamins and minerals mainly due to hypocalcaemia condition are important indicators of the disease. (Rosen, 2012; Laila, 2016). To identify the exact cause of egg-binding is difficult, because various factors like individual bird variation is recorded due to the age variations (very young and very old), body score

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condition (overweight), malnutrition includes hypocalcaemia or low protein, a sedentary lifestyle, adverse environmental changes (extreme cold and hot), lack in feeding and watering, passing of malformed eggs with improper positioned eggs, concurrent systemic disease and low temperature (Anne and Girl, 2006). Management of egg bound condition is depending on the general condition of affected individual bird and it depends on the duration of illness and location in the reproductive tract and time of presentation to the clinician. It can be managed by manually expelling the egg from cloaca/reproductive tract or by surgical removal of the egg from the reproductive tract. Supplementation of calcium and digestible sugar, oxytocin and topical intra-cloacal administration of prostaglandin E2 gel are recommended in manual manipulation method (De Matos and Morrisey, 2005; Harrison and Lightfoot, 2006). In surgical correction method include insertion of the syringe into the egg present into the abdominal cavity (ovocentesis) and removal of the contents so that reduce the size of egg which helps to manage the condition. Supportive therapy includes fluid therapy, supplementation of multi-vitamins with medicinal management includes broad spectrum antibiotics, and steroids to control the concurrent bacterial infection and reduce the pain respectively are recommended (Harrison and Lightfoot, 2006; Kaikabo et al., 2007). Scientifically selection of genetically egg bound resistant birds and various managemental factors such as proper time/age of breeding and providing the suitable environmental conditions like healthy lifestyle with proper diet and less environmental stressors causes’ reduction in egg bound syndrome. If breeding are not necessary require to bird lover than spaying will be done in small size birds. Provision of flying in caged birds helps to maintain the body condition of bird. Daily closed supervision of birds for displaying any symptoms of egg-binding minimise the condition in birds.

4. Conclusion
It is concluded that non-surgical approach i.e. manual manipulation of egg can be adopted successfully in fresh and promptly diagnosed cases near to the cloacal part.

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Conflict of Interest
An author declares that there is no conflict of interest.

References