

*Short Communication*

RADIOGRAPHIC DIAGNOSIS OF EGG BINDING SYNDROME IN A COCKATIEL

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ABSTRACT

Egg binding and dystocia are most commonly reported in cockatiel, lovebirds, finches, and canaries. Egg binding occurs when an egg is not passed through the oviduct at a normal rate and can be caused by malnutrition, lack of exercise, systemic disease, injury from a previous dystocia or malformed eggs. A one year old Cockatiel, weighing 80gm was presented to Avian and Exotic Pet Unit (AEPU) (OP) unit at Madras Veterinary College, Teaching Veterinary and Clinical Complex, Chennai, with a history of reduced activity and anorexia for the past two days. The bird was sent for plain radiography for confirmatory diagnosis. In radiography, presence of thin shelled egg was noticed. Laterally placed egg was identified in oviduct. Liquid paraffin was infused cloacally and the egg was successfully removed manually through cloaca.

KEY WORDS: Egg binding, Cockatiel, Radiograph, Manual manipulation method.

INTRODUCTION

Cockatiels, budgerigars (*i.e.*, parakeets), and finches are the most popular pet birds world-wide and the species most commonly affected by egg binding (Pollock, 2002). These birds tend to present with more severe clinical signs, possibly because of their small size. (Pollock, 2002). Egg binding is defined as the failure of an egg to pass through the oviduct within a normal period of time. It is one of the most common obstetric complications in birds (Laila, 2016). Most birds will form and lay an egg 24 to 26 hours following ovulation; eggs are generally laid 48 hours apart (Johnson, 2015). The follicle will travel the length of the reproductive tract while spending variable amounts of time in different anatomic parts; however, the majority of time is spent in the uterus, where the shell is applied before laying (Anthony, 2016). Causes of egg binding may include chronic egg laying with oviductal muscle dysfunction, vitamin deficiencies, malformed eggs, damage to the oviduct, systemic disease, species predilection, or calcium metabolic syndrome that relates to calcium exhaustion or lack of absorption or availability. First-time egg-laying hens may be predisposed to egg binding or dystocia. (Bowles 2006). If left untreated, egg binding can result in long-term egg retention and granuloma formation, uterine impaction, extra-uterine eggs, and death.

Case history and clinical examination

A cockatiel of one year age, weighing 80gm was presented to Avian and Exotic Pet Unit (AEPU) (OP) Unit at Madras Veterinary College, teaching Veterinary and Clinical Complex, Chennai, with history of reduced activity, anorexia for the past two days. On Physical examination the affected birds' shows weak, swollen vent, reluctant to perch, tenesmus, labored respiration, persistent tail wagging and absence of defecation.

TREATMENT & DISCUSSION

The bird sent for plain radiography for confirmatory diagnosis of egg binding. In radiography, presence of thin shell egg was noticed. The laterally placed egg was identified in oviduct. Liquid paraffin was infused cloacally and the egg was pushed backward, while pushing the egg caution was taken not to push the egg up against kidney and spine (Doneley, 2010). The retained egg was successfully removed manually through cloaca. After egg removal the bird was treated with Inj. meloxicam 0.5-1mg /Kg I/M, Inj. Enrofloxacin 15mg/kg I/M, Following the removal of egg, reduction in tenesmus was noticed. The bird took feed normally from subsequent days. In order to prevent the recurrence of egg binding in this bird, the owner was advised to provide calcium supplementation and also to provide 12-14 hours light per day. Hypocalcaemia (low blood calcium) can result in soft shelled eggs which birds find difficult to pass and low calcium levels results in muscle function weakness within the reproductive tract. The cause of egg

binding is usually multifactorial and might include-



FIGURE 1: Cockatiels

It is concluded that non surgical approach *i.e.* Manual manipulation of egg method can be adopted successfully in fresh and promptly diagnosed cases of egg binding

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Hypocalcemia, Soft shell egg (Laila, 2016).



FIGURE 2: Standard full-body radiograph of an egg-binding in cockatiel with a large, thin shelled retained egg in coelomic cavity.

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