Successful Management of Egg-Bound Condition in Parrot (Psittaciformes): A Case Report

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OPEN ACCESS

Keywords

Egg bound condition, Parrot, Lignocaine, Liquid paraffin

How to cite this article:

Chaurasia, D. K., Singh, N., Singh, A., Gumpha, L. K., Lade, D., Jadav, K. K., Singh, S. and Podhade, D., 2024. Successful Management of Egg-Bound Condition in Parrot (Psittaciformes): A Case Report. *Vigyan Varta* 5(11): 67-69.

ABSTRACT

A two-year-old parrot, weighing 130 grams, was brought to Vet Care Clinic in Bhubaneswar, Odisha, with symptoms including anorexia, decreased activity, inability to lay eggs for the past three days, and swelling in the caudal abdomen. Based on the history, clinical signs, and physical examination findings, the parrot was tentatively diagnosed with an egg-bound condition. Conservative treatment was chosen, and the egg was manually removed after applying lubrication with lignocaine gel and liquid paraffin. The procedure was successful,

and the bird recovered without any reported complications.

INTRODUCTION

Egg binding is a condition characterized by the inability of an egg to pass through the cloaca within the normal timeframe, leading to difficulty in laying. This condition, also known as dystocia in hens, is not uncommon in pet birds and broiler breeds. Determining the exact cause of egg binding can be challenging, as it may result from various factors such as oviductal muscle dysfunction, vitamin and mineral deficiencies (particularly calcium deficiency or poor calcium absorption), low-protein diets, systemic diseases or shock, environmental stress, species predisposition, damage to the oviduct, or obesity and a sedentary lifestyle. Birds laying eggs for the first time are particularly susceptible to egg binding or dystocia (Bowles, 2006). If left untreated, egg binding can lead to complications such as granuloma formation, uterine impaction, extra-uterine eggs, and potentially death. Cases of egg binding have been reported in chickens (Joy and Divya, 2014) and cockatiels (Saranya *et al.*, 2017). This report details the diagnosis and management of an egg-bound condition in a parrot.

History and Clinical Observation

A two-year-old parrot, weighing 130 grams, presented at Vet Care Clinic in Bhubaneswar, Odisha, with symptoms including weakness, anorexia, reduced activity, mild breathing difficulties, and swelling in the caudal abdomen accompanied by severe straining. Based on the history, clinical signs, and findings from the physical examination, the case was tentatively diagnosed as an egg-bound condition, and conservative treatment was decided upon.

Treatment and Discussion

The bird was administered an intramuscular injection of Dexamethasone at a dose of 1 mg per kg of body weight to stabilize its condition. The cloaca was then cleaned with normal saline to remove dirt and debris. To facilitate easier handling, 2% lignocaine gel was applied to the cloacal mucosa for numbing. Liquid paraffin was used to lubricate the area by applying it between the egg and the lining of the cloaca. The egg was carefully extracted using fingers, ensuring it was not broken. Post-surgery, the parrot received a 0.2 ml injection of Meloxicam and a 0.5 ml injection of Gentamicin, both administered intramuscularly for two days. The owner was advised to provide shell grit daily. The bird recovered without any complications.

Fig 1: Egg-binding in Parrot with a large egg retained inside the cloaca.

Fig 2: Cloaca condition after removal of egg in parrot.

The two-year-old parrot in this instance had an egg-bound condition, consistent with Charlton's observation that young female birds at the onset of their laying period are often prone to this issue. In bird species, egg binding is a medical emergency that can be fatal if left untreated. At the time of presentation, the bird appeared dull and depressed, indicating that further delay in treatment could have worsened its condition.

In the present case, the exact etiology of the egg-binding condition remains unclear. Typically, causes can include salpingitis, atony or paralysis of the oviduct muscle, or an excessively large egg. According to (Srinivasan *et al.*, 2014) egg binding can result from a range of factors: heat stress (28.66%), asphyxia (23.23%), hypocalcemia (17.35%), salpingitis (7.54%), large egg size (6.18%), dehydration (5.73%), vent trauma (5.28%), obesity (3.62%), abnormal ovulation (1.81%), and oviduct neoplasm (0.60%).

In this case, the parrot was fed raw rice and bajra, which may have contributed to the condition. It is suggested that a diet high in calcium might be more appropriate. Conservative care was employed to address the illness, in line with (Joy and Divya, 2014) recommendation that mild physical manipulation is often sufficient. However, if such measures fail, surgery may be necessary. While no complications were reported in this case, Saif noted that prolapse of the oviduct is a common complication if egg binding is left untreated.

CONCUSSION

A parrot was diagnosed with an uncommon case of egg binding, which was effectively managed using a conservative approach and careful digital manipulation, aided by appropriate lubrication with liquid paraffin and lignocaine gel. Early detection and prompt treatment are crucial for a positive outcome and to prevent complications in affected birds. Following the treatment, the parrot recovered without any incidents or further complications.

Conflict of Interest. There are no conflicts of interest among the authors.

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