

# An Overview Of Conjunctivitis In Agapornis roseicollis Aviary

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## Abstract

An epornitic study of conjunctivitis that occurred in love birds( Agapornis roseicollis). Lovebirds (Agapornis roseicollis Selby, 1836 ) belong to the order Psittaciformes are among common captive bird species . The infected birds survivality , recovery and mortality rate under adequate food, water and proper treatment in the form of eye drops and granules administered into the drinking water. The infected birds have been observed for a duration of 10 days. The study reveals the survival and fatal fate of birds despite treatment if the conjunctivitis spread binocularly.

**Keywords :** Agapornis roseicollis , conjunctivitis , love birds, binocularly.

## Introduction

Lovebirds (Agapornis roseicollis Selby, 1836 ) belong to the order Psittaciformes and are among common captive bird species . The name “love bird” is derieved from the strong pair bond they have between mates. Members of the genus Agapornis are native to African forests and savannas (Forshaw,1989). These birds occasionally gets infected with seasonal conjunctivitis <sup>[2]</sup> . Conjunctivitis is the inflammation in which conjunctiva becomes swollen and visible, presenting ocular symptoms such as excessive blinking, discharge, eye rubbing with feathers, loss of appetite and in severe cases the bird becomes blind to cases of death<sup>[2]</sup> and it is also contagious <sup>[2]</sup> <sup>[3]</sup>. There are several causes for conjunctivitis in birds including bacterial ( Chlamydia, mycobacterium , mycoplasma , etc), fungal ( Candida) and viral infections (pox, infectious bronchitis ,etc) <sup>[4]</sup>

Thus this study is designed to observe the cases of infected birds those have been quarantined from the colony setup aviary and have been undergoing treatment with antibiotics and it also focus about the survival, healing and death of the infected birds <sup>[7]</sup> undergoing treatment. It has

also been observed that, conjunctivitis infected among love bird is treatable at an early stage. But as infection spread binocularly the birds eventually emaciate due to illness and starve to death.

## Material and Methods

Among a colony of  $20 \pm 5$  lovebirds, initially 6 birds presented initial symptoms of infection. These infected birds were quarantined in isolators with adequate food and water. Additionally, the birds also received dosage of antibiotics in the form of eye drop gatifloxacin <sup>[1]</sup> twice daily which were installed into the infected eyes and Tetracycline Hydrochloride <sup>[6]</sup> administered into drinking water. These infected birds health conditions and the pathogenesis were evaluated for a duration of 10 days.

## Results

Infected Lovebirds(100%) initially shows signs of infection unilaterally, while infected birds (50%) develop the infection binocularly within 2 days. In 3<sup>rd</sup>-4<sup>th</sup> day there is change in disease severity and by 5<sup>th</sup>-6<sup>th</sup> day there have been cases of death of 2 birds, 1 bird being critical and the rest shows signs of reviving. During 6<sup>th</sup>-7<sup>th</sup> days another death incidence of the critical bird has been observed while rest have shown good signs. During 7<sup>th</sup>-8<sup>th</sup> days there have been incidence of curing from the disease along with formation of phthisical blind eye with cataract among the healing birds. The infected birds eyes both dead and live were swollen, closed <sup>[5]</sup> with pus accumulation and cataract formation <sup>[10]</sup>. Along the 9<sup>th</sup>-10<sup>th</sup> day also the conditions were seen constant which are shown in **Table-1**

**Table 1 :** Information of the birds ocular health in the quarantine period of 10 days along with death & survivors

Factors (in total)	1-2 days	3-4 days	5-6 days	7-8 days	9-10 days
Unilaterally affected birds	3	3	3	3	3
Binocularly affected birds	3	3	1	-	-
Birds showing healing condition	-	2	2	3	3
Birds showing worsening condition	-	4	2	-	-
No of deaths (in total)	-	-	2	3	3
No of survivors (in total)	6	6	4	3	3

Post healing process, the birds also exhibit intense scratching in the phthisical blind eye resulting in rashes around the eye which bleeds occasionally. Thus, at 10<sup>th</sup> day there were 3 survivors, out of which 1 of the bird exhibit a very good prognosis while other two were one eyed. At the 12<sup>th</sup>

day the birds were taken out from quarantine with the bird showing good prognosis was released back into the aviary while the other 2 were released into cages meant for disabled birds.

## Discussion

Outbreak of conjunctivitis is common among birds. But the caged birds are very prone to come in contact with contaminated food or feces of an infected bird and release of new bird without proper quarantine and disinfecting also results in its widespread. The emaciated condition of love birds with conjunctivitis might have resulted from emaciation due to anorexia and difficulty in searching for food.

## Conclusion

Agapornis (Agapornis roseicollis Selby, 1836 ) are very prone to conjunctivitis thus necessary precautions need to taken while releasing new birds in the aviary. Close monitoring of birds health conditions , regular cleaning , maintaining hygiene , quarantine and treatment of sick birds . Mosquitoes should also be kept away, as they also spread infections from an infected bird to a healthy bird<sup>[5]</sup>. Additionally, maintaining a spacious environment in aviary for free flying , providing adequate healthy food , clean drinking water and monitoring temperature and setup based on their native environment <sup>[9]</sup> are important for successful bird keeping hobby or aviculture.

The present observation were in accordance with <sup>[1,4]</sup> as antibiotics have been proven best for treating early conjunctivitis. But in late stage the eyes gets swollen, closed along with pus accumulation , cataract <sup>[10]</sup> and corneal opacity resulting emaciated condition<sup>[5]</sup> leading to starvation and death .

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