

CONJUNCTIVITIS IN PIGEONS (*COLUMBA LIVIA DOMESTICA*) : CAUSES, DIAGNOSIS AND TREATMENT

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ABSTRACT : Conjunctivitis, also known as pink eye is inflammation of the outermost layer of the white part of the eye and the inner surface of the eyelid. It makes the eye appear pink or reddish. Pain, burning, scratchiness, or itchiness may occur. The affected eye may have increased tears or be “stuck shut” in the morning. Swelling of the white part of the eye may also occur. Itching is more common in cases due to allergies. Conjunctivitis can affect one or both eyes. Forty pigeons included in this study were suffered from infection of conjunctiva. Eye swabs have been taken from infected pigeons were cultured on nutrient, specific medias and Sabouraud dextrose agar. Plates were incubated in aerobic conditions at 37°C for 24-48 hours. After presumptive identification based on colony morphology and microscopic morphology. *Staphylococcus aureus* bacteria were represent 19 isolates out of 40 samples. Gram negative *Bacilli* were represent 10 isolate from 40 samples. Eleven isolates were negative to bacterial isolation. *Staphylococcus aureus* has been revealed high resistant to all concentrations of Acacia extract (*Senegalia greggii*). Doxytetracycline is more effective to inhibit the growth of *S. aureus* followed by Ciprofloxacin and Rifampicin and with no efficacy of amoxicillin.

Key words : Avian conjunctivitis, pigeons diseases, *S. aureus*.

INTRODUCTION

Avian conjunctivitis is an eye infection can affect any kind of bird, including house finches, cockatiels, parakeets, cockatoos, mynahs, songbirds, wild birds, and many others. The broad range of possible causes can make a diagnosis difficult. While a piece of feed lodged near the conjunctiva can cause the irritation and discharge often seen, more serious causes, such as a viral or bacterial infection, can further compromise the health of your bird. Recognizing the symptoms and getting medical help promptly can save not only your bird's eyesight, but also his life. Birds can contract a bacterial infection in the conjunctiva, or the membrane that surrounds the eyes. This tissue will become swollen and irritated, and the infection can spread to other parts of the eye and upper respiratory system (Abrams *et al*, 2002). Pigeons (*Columba livia domestica*) belong to order Columbiformes and family Columbidae (Fig. 1). Pigeons are used in racing or pigeon sport, as ornamental birds, laboratory specimens, companion animals and they are also raised for meat production (Magnino *et al*, 2009).

Conjunctivitis is most often a symptom of another

health problem. Symptoms of conjunctivitis in birds due to the many causes of conjunctivitis, relaying all the symptoms you see to your veterinarian can help point to the reason your bird's eyes are infected, as some symptoms are indicative of certain conditions. Most signs are related to the eyes, sinuses and upper respiratory tract, and can include: Swollen, red and irritated eyes, crusty eyes, watery eyes, cloudy or glassy eyes, upper respiratory infection, sinusitis, eye or nostril discharge, facial swelling, tearing, sneezing, swollen sinuses, inflammation in the eyelids, sensitivity to light, weakness in eyelid, deposits on cornea, blindness, starvation, listlessness, sit fluffed up, reduced jaw tone, crusty nodules on legs or face. Through physical examination and diagnostic testing are necessary to determine a treatment plan (Griggs, 2019; Azari and Barney, 2013). Infected birds may have red, swollen, runny or crusty eyes. In severe cases, the eyes become swollen shut and the bird becomes blind and unable to fend for itself. You might observe an infected bird sitting quietly in your yard, clumsily scratching an eye against its foot or a perch. While some infected birds recover, many die from starvation, exposure, or predation. Additional symptoms may be respiratory distress (open