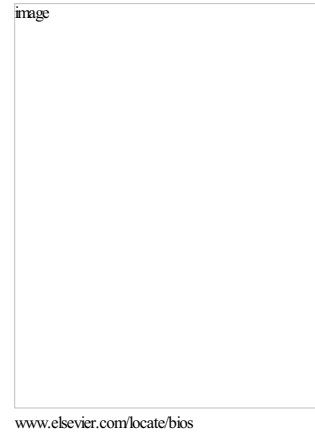


ANTIMICROBIAL SUSCEPTIBILITY PATTERNS
OF BIOFILM FORMING *STAPHYLOCOCCUS*
AUREUS ISOLATED FROM PIGEON EXTERNAL
OCULAR INFECTIONS

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Research**Antimicrobial Susceptibility Patterns of Biofilm Forming *Staphylococcus aureus* Isolated from Pigeon External Ocular Infections**

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Abstract

Pathogenic microorganisms cause external ocular infections due to their virulence factors and reduced host defenses that may result from many factors such as living condition, nutrition, genetics, physiology, hygiene, fever and age. *Staphylococcus* species are a predominant bacterial isolate among the known and opportunistic pathogens in eye infections. The changing profile of microorganisms involved in ocular infections and the emergence of acquired microbial resistance dictate the need for investigative studies regarding bacterial profiles and antimicrobial susceptibility patterns of external ocular infections. The aim of this study was to determine the prevalence of *S. aureus* among pigeon ocular infections and also evaluate their biofilm production ability and antibiotic resistance patterns.

A total number of 20 pigeons with a diagnosed eye infection were included in this project. Conjunctival specimens were collected with swabs presoaked in sterile normal saline. The growth was identified by standard laboratory procedure and susceptibility testing of the bacterial isolates were performed by the Kirby-Bauer method. The biofilm formation ability of the isolates was also assessed using the microtiter plate method.

Out of 20 specimens processed, 20% pigeons had staphylococcal eye infections. The resistance pattern of these isolates showed that *Staphylococcus* spp. from pigeon samples were resistant to tetracycline (100%), erythromycin (100%), azithromycin (100%), nalidixic acid (100%), cefazolin (50%). All of *Staphylococcus* spp. from pigeon samples were susceptible to

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