CAIRO UNIVERSITY

Cairo university

Faculty of Veterinary Medicine

Phenotypic and Genotypic Characterization of *Salmonella* Spp.isolated From broiler chickens and Human

A ***Thesis*** *Presented by*

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(B.V.Sc., Cairo University, 2003)

For the Degree of Master in Veterinary Medical Sciences
(Bacteriology, Immunology and Mycology)

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2020

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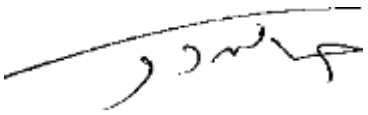

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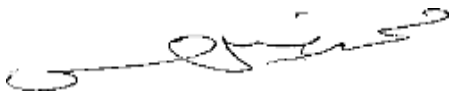

27 / 10 / 2020

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ABSTRACT

The aim of this present study to survey the antimicrobial resistance, ESβL and virulence genes among *Salmonella* serovars isolated from broiler chickens and Human .300 broiler chickens and 60 stool human samples were investigated for *Salmonella* by cultural, biochemical and serotyping, 44 isolates were positive for *Salmonella* with the most predominant serotypes are *S.* Enteritidis and *S.* Typhimurium in all isolates from broilers chickens and Human. Broilers *Salmonella* isolates showed high resistance to Imipenem (83.3%) followed by Ceftriaxone(73.3%),On contrast showed high sensitive to Cephalexin (73.3%).But in human isolates showed high resistance to Ampicillin-Sulbactam (21.4%) ,On contrast showed high sensitive to Ceftazidime, Amikacin and Trimethoprim-Sulfamethoxazole (100 %) for each . By using PCR test for detection of four virulence genes (*invA* , *adrA* , *ompA* and *csgD)* and nine resistance genes (*int1*, *int2*, *int3*, Bla_{TEM}, Bla_{CTX}, Bla_{OXA}, *Mox*,*gyrA* and *gyrS*), detected the presence of *invA* virulence and Bla_{TEM} resistance gene in all serovars isolated from broiler chickens and human. Finally, in our study the results of genotypic and phenotypic analysis, found close relation between human and broiler chickens *Salmonella* strains.

Keywords :

Broilers - ESBLs – Human – *Salmonella* Serovars – Virulence genes

ACKNOWLEDGEMENT

All thanks to my GOD who alone helps me to complete thisstudy.

I would like to express my gratitude to my major adviser , ***Prof,Dr. Wagih Armanious*** *,professor of Microbiology ,Department of Microbiology ,Faculty of veterinary medicine , Cairo University . For his academic advice and for his valuable direction throughout the preparation of this study.*

My deepest thanks to ***Dr, Ahmed Orabi****. Lecturer of Microbiology, Department of Microbiology, Faculty of Veterinary Medicine .Cairo University for his guidance and his support throughout this study.*

Thanks to ***Dr. Zainab Mohammed Saeed ,*** *professor at the National Research Center*

My gratitude to ***Dr. Ismael Reheel ,*** *professor of Microbiology, Department of Microbiology, Faculty of veterinary medicine, Beni-seiuf University, for his kind and valuable help during this work.*

My deepest thanks for ***Dr. Emad Mokhtar ,****chief Researcher of Bacteriology, Animal Health Research Institute Dokki,Giza.*

Finally , I would like to extend special thanks to my family for their continuous advices and encouragement all over this work especially my father , my mother, and all my family .

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