

ABSTRACT

Cairo University

Faculty of Veterinary Medicine

Department of Biochemistry and Chemistry of Nutrition

Name: Sahar Ahmed El-Maedawy

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“Biochemical alterations in poultry exposed to ochratoxin A and trial for its treatment.”

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Supervisors: Prof. Dr. Samy Ahmed Abd El-Aziz

Professor of Biochemistry and Chemistry of Nutrition, Vice Dean Faculty of Veterinary Medicine, Cairo University

Prof. Dr. Jakeen Kamal El-Haleem El-Jakee

Dr. Said Zaki Moustafa Moussa

Ass. Prof. of Biochemistry and Chemistry of Nutrition, Faculty of Veterinary Medicine, Cairo University

Dr. Bedir I. A. Agag

Chief Researcher, Department of Biochemistry and Toxicology, Animal Health Research Institute, Dokki

The present work was planned to illustrate the clinical effect of ochratoxin A (OA) in broiler chicken, to determine the biochemical and histopathological alterations induced by OA, and to test the ability of aspartame and piroxicam for preventing and medicating the toxic effects of OA in broilers. Simultaneous administration of potential antidote (aspartame and piroxicam) with OA or after OA intoxication helped to counteract ochratoxicosis symptoms and nearly showed normal clinical signs as well as improvement the severity of and histopathological alterations. Treatment of intoxicated birds with aspartame or piroxicam contracted the deleterious effect of OA on the internal and lymphoid organs, which observed by improvement in the level of serum creatinine, uric acid, electrolytes, enzymatic activities, OA residue, protein and lipid profile.

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LIST OF ABBREVIATIONS

Abbreviation	Definition
AF	Aflatoxin
AFB1	Aflatoxin B1
ALP	Alkaline phosphatase
Ca	Calcium
ChE	Cholinesterase
DNA	Deoxyribonucleic acid
Fe	Iron
GD	Glutamate dehydrogenase
GFR	Glomerular filtration rate
GGT	Gamma-glutamyl transferase
K	Potassium
MDA	Malondialdehyde
Mg	Magnesium
Mn	Manganese
NSAID	Non steroidal anti-inflammatory drug
OA	Ochratoxin
O α	Ochratoxin alpha
P	Phosphorus
PCTs	Proximal convoluted tubules
PCV	Packed cell volume
Zn	Zinc