ABSTRACT

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Title of thesis:
"Biochemical alterations in poultry exposed to ochratoxin A and trial for its treatment."
Thesis for the Degree of Ph.D. of Philosophy in Veterinary Medical Science, (Biochemistry and Chemistry of Nutrition)

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The present work was planned to illusdate the clinical effect of ochratoxin A (OA) in broiler chicken, to determine the biochemical and histopathologial 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.

CONTENTS

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 filtartion rate
GGT	Gamma-glutamyl transferase
K	Potassium
MDA	Malondialdhyde
Mg	Magnesium
Mn	Manganese
NSAID	Non steroidal anti-inflammatory drug
OA	Ochratoxin
Oα	Ochratoxin alpha
P	Phosphorus
PCTs	Proximal convoluted tubules
PCV	Packed cell volume
Zn	Zinc