



**Cairo University**  
**Faculty of Veterinary Medicine**  
**Department of pathology**



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## **PATHOLOGICAL STUDIES ON HEPATIC TISSUES OF SLAUGHTERED CATTLE AND BUFFALOES**

A Thesis presented by

**Islam Elgohary Ahmed Elgohary**

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Pathology (General, Special and Post mortem)

Under Supervision of

**Prof. Dr. Mahmoud Aly Mahmoud**

Professor of Pathology

Faculty of Veterinary Medicine

Cairo University

**Dr. Reham Mahmoud Mohamed**

Lecturer of Pathology

Faculty of Veterinary Medicine

Cairo University

**Prof. Dr. Nasser Gamal El Dine**

Professor of Pathology

Animal Health Research Institute,

El Dokki, Giza

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**Cairo University**  
**Faculty of Veterinary Medicine**  
**Department of pathology**



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**Supervision sheet**

**Prof. Dr. Mahmoud Aly Mahmoud**

Professor of Pathology- Faculty of Veterinary Medicine-  
Cairo University, Egypt.

**Dr. Reham Mahmoud Mohamed**

Lecturer of Pathology- Faculty of Veterinary Medicine- Cairo University,  
Egypt.

**Prof. Dr. Nasser Gamal El Dine Mohamed**

Professor of Pathology -Animal Health Research Institute, El Dokki,  
Giza, Egypt.



**Cairo University**  
**Faculty of veterinary medicine**  
**Pathology Department**



**Name: Islam Elgohary Ahmed Elgohary**

**Date and place of birth: 21-3-1989, cairo**

**Nationality: Egypton**

**Title of thesis: " pathological studies on hepatic tissue of slaughtered cattle and buffalos"**

**Scientific degree: Master's Degree (M.V.Sc.)**

**Supervisors:**

**Prof. Dr. Mahmoud Aly Mahmoud**

Professor of Pathology, Faculty of Veterinary Medicine, Cairo University

**Dr. Reham Mahmoud Mohamed**

Lecturer of Pathology, Faculty of Veterinary Medicine, Cairo University

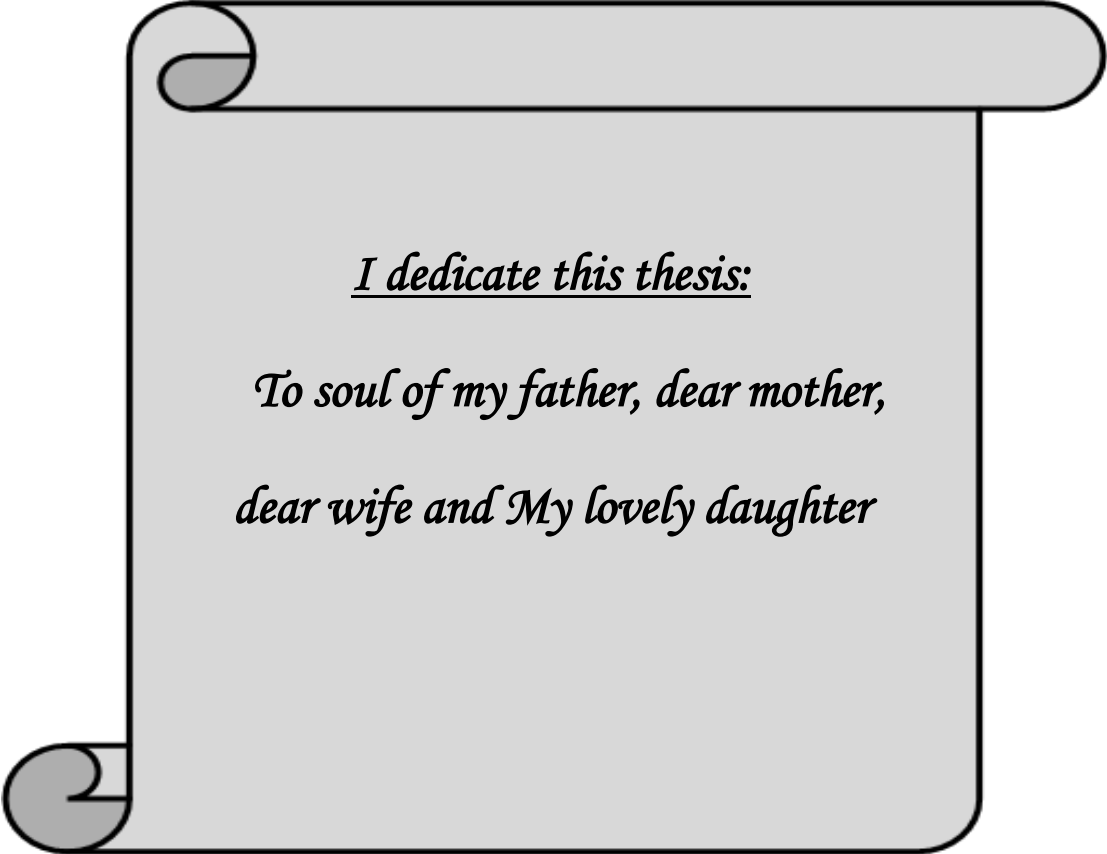
**Prof. Dr. Nasser Gamal Eldine Mohamed**

Professor of Pathology, Animal Health Research Institute, Dokki, Giza

**Abstract**

The liver is the most important organ in the body, any hepatic affection leading to decrease animal production and reproduction causing high economic losses, on other hand the liver is edible part in Egypt. So any affection on it will affect human health. In our study, during August 2014 to August 2015, two hundreds and thirteen liver samples of slaughtered cattle and buffaloes were collected from Elbastin abattoir, Cairo governorate, Egypt for parasitological, bacteriological , toxicological and pathological examination. The overall incidence of fasciola infestation was 7.3% while, the bacterial infection was 0.5% for *S.aureus* and 0.5% for *C.Pseudotuberculosis*. The incidence rate of aflatoxicosis in representative samples (39 samples) using TLC was 79.5% (where 31 samples out of 39 were positive). Using LC MS/MS, nine samples were examined and found to be affected by AFM1. Histopathology in case of fasciolasis showing biliary hyperplasia and portal fibrosis with infiltration by esinophiles , neutrophiles and mononuclear cells. In case of *S.aureus*, presence of caseous necrosis surrounded by massive number of neutrophiles and fibrous connective tissue capsule were characteristic while presesnce of liquifactive necrosis surrounded by neutrophiles were common in case of *C.pseudotuberculosis*. the samples affected by AFs showing endophelbitis in portal veins and portal fibrosis. Hyperplasia in bile ductule was also seen together with congestion in hepatic sinusoid and portal blood vessel. On the other hand comet test showing gentoxic effect of aflatoxin on DNA of the examined hepatocytes.

**Key words:** Fasciola- *S.aureus*- *C.Pseudotuberculosis*- Aflatoxins- Comet test



*I dedicate this thesis:*

*To soul of my father, dear mother,  
dear wife and My lovely daughter*

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