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شبكة المعلومـــات الجامعية التوثيق الالكتروني والميكروفيا.



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# PREVALENCE OF HEPATITIS B SURFACE ANTIGEN AND AIDS ANTIBODIES IN EGYPTIAN PREGNANT WOMEN

#### Thesis

Submitted for partial fulfillment of M.D. Degree in Clinical Pathology

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بالفالغالك عَلْمَ ٱلإِنْسَيِّانَ مَإِلَمْ يَعَبْلُمُ العشكق، ١-٥ 

# TO MY PARENTS TO MY HUSBAND

and MY LOVELY CHILDREN

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#### LIST OF ABBREVIATIONS

- Ab: Antibody.

- Ag: Antigen.

- AIDS: Acquired immunodeficiency syndrome.

- ALT: Alanine aminotransferase.

- Anti-HBc: Antibody to hepatitis B core antigen.

- Anti-HBs: Antibody to hepatitis B surface antigen.

- AST: Aspartate aminotransferase.

- ELISA: Enzyme linked immunosorbent assay.

- HBcAg: Hepatitis B core antigen.

- HBeAb: Hepatitis B e antibody.

- HBeAg: Hepatitis B e antigen.

- HBIg: Hepatitis B immunoglobulin.

- HBsAg: Hepatitis B surface antigen.

- HBV: Hepatitis B virus.

- HBV DNA: Hepatitis B virus desoxyribonucleic acid.

- HCV: Hepatitis C virus.

- HDV: Hepatitis D virus.

- HIV: Human immunodeficiency virus.

- HTLV: Human T cell lymphotropic virus.

- IFA: Indirect immunofluorescence assay.

- IPs: Infectious particles.

- IVDUs: Intravenous drug users.

List of Abbreviations ------

- LAV: Lymphadenopathy associated virus.

- PCR: Polymerase chain reaction.

- PMI: Placental membrane inflammation.

- RIA: Radioimmunoassay.

- RIPA: Radioimmunoprecipitation assay.

## TABLE OF CONTENTS

Page	
c INTRODUCTION AND AIM OF THE WORK(1)	
# REVIEW OF LITERATURE(3)	
Maternal-Infant transmission(3)	
- Neonatal infection(4)	
- Hepatitis B(7)	
- AIDS(27)	
Diagnosis(60)	
- HBV serological markers(60)	
- Serological diagnosis of HB(65)	
- AIDS testing: Now and in the future(71)	
Prevention and control(93)	
- Prevention of vertical transmission of HBV .(93)	
- Prevention of AIDS(100)	
- Universal precautions(107)	
- Universal process	
⇔ SUBJECTS AND METHODS	)
(125	)
↑ RESULTS(140	)
© SUMMARY AND CONCLUSION (152	)
© RECOMMENDATIONS(155	i )
© RECOMMENDATIONS(158	3)
© REFERENCES	

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### INTRODUCTION AND AIM OF THE WORK

Maternal-infant transmission may occur transplacentally or during the birth process. The chance of vertical transmission increases near delivery and with acute more than chronic carriers. Antigenaemia for HB virus develops in the baby within two months of birth and tends to persist (Ramia and Arif, 1991).

Maternal-infant transimission of hepatitis B during the neonatal period (perinatal transmission) has been found to be a common form of hepatitis B transmission and a common cause of chronic antigenaemia in South East Asia (Beasley et al., 1982).

In North America and Europe, the incidence of perinatal transmission is much less because chronic antigenaemia is not as common and because carriers tend to be less infective as indicated by the absence of HBeAg (Tong et al., 1981).

In Egypt, maternal-infant transmission at birth was not found to be a common cause of hepatitis B transmission although it is known that the prevalence of chronic hepatitis B infection is relatively high (Sherif et al., 1985).

 Introduction	and	Aim	of The	Work (1)	)