فحـــص إيجابية مصـــل الهليكوباكتر بيلوري في حـــالات القـــئ المستعصـــي بالسيـــــدات الحوامـــــل

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توطئة للحصول علي درجة الماجستير

في التوليد وأمراض النساء

مقدمة من

طبيبة\ ايمـــان محمـــد حملـــي

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٢٠١٤

Screening for H.pylori Serum IgG Seropositivity in Hyperemesis Gravidarum Pregnant Ladies

Thesis

Submitted for Partial Fulfillment of the Master Degree in Obstetrics and Gynecology

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✍ Eman Mohamad Hemally

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List of Abbreviations

ACG	American College of Gastroenterology
ACTH	Adrenocorticotropic Hormone
AUC	Area Under the ROC Curve
AU/ml	Absorbance units per milliliter
b.d	Bis in die 'twice daily'
Cag	Cytotoxin Associated Gene Protein
CI	Confidence interval
COPD	Chronic Obstructive Pulmonary Disease
C-UBT	Carbon Urea Breath Test
ELISA	Enzyme Linked Immuno-sorbant Assay
FDA	Food and Drug Administration
FMIA	Flow Microparticle Immunofluorescence Assay
GERD	Gastroesophageal Reflux Disease
HCG	Human Chorionic Gonadotropin
HG	Hyperemesis Gravidarum
HP	H.pylori /Helicobacter Pylori
HS	Highly Significant
IL	Interleukin
IM	intestinal metaplasia
ITP	Idiopathic Thrombocytopenic Purpura
MALT	Mucosal associated lymphoid tissue
NSAID	Non-Steroidal Anti-Inflammatory Drugs
NVP	Nausea and Vomiting of Pregnancy
PCR	Polymerase Chain Reaction
PPI	Proton Pump Inhibitors
S	Significant
TB	Toluidine blue
Th	T Helper Cell
TNF- α	Tumor Necrosis Factor
Vac A	Virulence Factors Toxin
+PV	Positive Predictive Value
-PV	Negative Predictive Value

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Introduction

The nausea and vomiting associated with pregnancy usually begins by 9-10 weeks of gestation, peaks at 11-13 weeks, and resolves in most cases by 12-14 weeks. Studies estimate that nausea and vomiting occurs in 50-90% of pregnancies. In 1-10% of pregnancies, symptoms may continue beyond 20-22 weeks ***(Bailit, 2005).***

Hyperemesis gravidarum (HG) is characterized by persistent nausea and vomiting associated with ketosis and weight loss (>5% of prepregnancy weight). It may cause volume depletion, electrolytes and acid-base imbalances, nutritional deficiencies, and even death. Severe hyperemesis requiring hospital admission occurs in 0.3-2% of pregnancies ***(Goodwin, 2008).***

Prevalence of HG varies from 0.3 to 1.5% of all live births ***(Sheehan, 2007)***. The exact cause of HG is not well known and is probably multifactorial in which psychological factors, alteration of gastrointestinal motility, hormonal changes, infections, immunological, metabolic and anatomical factors appear to intervene ***(Verberg et al., 2005).*** It is the most common cause of hospitalization in the first half of pregnancy and second only to preterm labor for pregnancy overall. It can

be associated with serious maternal and fetal morbidity such as Wernicke's encephalopathy, fetal growth restriction, and even maternal and fetal death ***(Sheehan, 2007).***

The Helicobacter pylori (H. pylori) are recognized as a significant causative agent of gastritis in humans and as an essential factor in the pathogenesis of peptic ulcer ***(Dunn et al., 1997)***. Various findings suggest that this organism is also involved in the pathogenesis of cancer and lymphoma of the stomach ***(Versalovic et al., 1998).***

In developing countries, 70% to 90% of the population is infected by the bacteria, while in industrialized countries the prevalence is smaller, ranging between 25% and 50% ***(Dunn et al., 1997).***

The action of H. Pylori is widely studied in literature and some studies now focus specifically on its association with nausea and vomiting ***(Kenneth, 2010).*** A possible association between H. pylori infection and HG has been the focus of researching for some studies ***(Kazerooni et al., 2002).***

Several ways of testing exist. One can test noninvasively for H. pylori infection with a blood antibody test, stool antigen test, or with the carbon urea breath test (in which the patient drinks ^{14}C or ^{13}C labelled urea, which the bacterium

metabolizes, producing labelled carbon dioxide that can be detected in the breath). Another method for detecting H. pylori infection is a biopsy check during endoscopy with a rapid urease test, histological examination, and microbial culture ***(Stenström et al., 2008).***

In essence, serology samples the entire stomach whereas biopsy only samples a small region, and the inflammatory process may be patchy, so serologic analysis may be more sensitive than diagnostic methods involving biopsy ***(Blaser, 2000).*** The development of H. pylori-specific fluorescent serum antibody test allows for suitable screening for H. pylori infection and with the ease of his simple, cheap and non-invasive testing, it is possible to detect H. pylori infection in pregnant women ***(Kocak et al., 1999).***

Aim of Work

To assess the value of screening for helicobacter pylori seropositivity in hyperemesis gravidarum for better evaluating the condition and improving the cure rate especially in resistant cases of hyperemesis gravidarum.

Question:

In women suffering from hyperemesis ravidarum is the level of H.pylori IgG higher than normal pregnant women?