

# **Anti-Helicobacter Pylori Antibodies in Serum of Women with Unexplained Infertility**

*Thesis*

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

*By*

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## List of Abbreviations

<b>ACG</b>	: American College of Gastroenterology
<b>Cag. A</b>	: Cytotoxin associated gene protein
<b>COPD</b>	: Chronic obstructive pulmonary disease
<b>C-UBT</b>	: Carbon Urea Breath Test
<b>DNA</b>	: Deoxyribonucleic acid
<b>ELISA</b>	: Enzyme-linked immunosorbent assay
<b>FMIA</b>	: Flow microparticle immunofluorescence assay
<b>FSH</b>	: Follicle-stimulating hormone
<b>GnRHa</b>	: Gonadotrophin releasing hormone analogue
<b>HOXA</b>	: Homeobox A10 gene
<b>HP</b>	: H. pylori
<b>HSG</b>	: Hysterosalpingogram
<b>ICSI</b>	: Intracytoplasmic sperm injection
<b>IF</b>	: Implantation failure
<b>IL</b>	: Interleukin
<b>IM</b>	: Intestinal metaplasia
<b>ITP</b>	: Idiopathic thrombocytopenic purpura
<b>IU</b>	: Unexplained infertility
<b>IUI</b>	: Intrauterine insemination
<b>IVF</b>	: Invitro fertilization
<b>LH</b>	: Lutenizing hormone

## *List of Abbreviations*

<b>LPD</b>	: Luteal phase defect
<b>MALT</b>	: Mucosal-Associated Lymphoid Tissue
<b>NSAID</b>	: Non-steroidal anti-inflammatory drug
<b>PCR</b>	: Polymerase chain reaction
<b>PCT</b>	: Post coital test
<b>PPI</b>	: Proton pump inhibitor
<b>ROS</b>	: Reactive oxygen species
<b>RSA</b>	: Recurrent spontaneous abortion
<b>T3</b>	: Triiodothyronine
<b>T4</b>	: Thyroxine
<b>TNF-<math>\alpha</math></b>	: Tumor necrosis factor alpha
<b>TSH</b>	: Thyroid-Stimulating Hormone
<b>UBT</b>	: Urea breath test
<b>Vac. A</b>	: Vaculating cytotoxin A
<b>WHO</b>	: World Health Organization



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## Introduction

According to a study conducted by the Egyptian Fertility Care Society and sponsored by the World Health Organization (WHO), infertility in Egypt affects 12 percent of Egyptian couples. Of these women, 4.3 Percent suffer from primary infertility (have never been pregnant) and 7.7 percent suffer from secondary infertility (have been pregnant before, Even if the pregnancy ended in a miscarriage or an ectopic pregnancy). The number of women aged 15 to 49 years exceeds 25 million, which means that at least 3 million women are infertile in Egypt **(Hassan Sallam, 2013)**.

Infectious agents such as Chlamydia, Mycoplasma, viruses and yeasts can impair sperm motility, vaginal, uterine or/and tubal level. In addition, all these agents induce inflammatory processes and cell-mediated immunological reactions **(Pellati et al., 2008)**.

In 2011, Ambrosini et al. found serum anti- H.pylori antibodies in 17% of 277 couples attending an infertility centre, but both partners were seropositive only in 6.6% of cases. The authors thus concluded that person-to-person H.pylori transmission rarely occurs between young, sexually active adults **(Ambrosini et al., 2011)**.