

١٣٩٢

C.V

# PELVIC INFLAMMATORY DISEASE

ESSAY

مقاله

PRESENTED BY

HESHAM MOHAMED ABDEL RAHEIM  
(MB, BCh)

SUBMITTED IN PARTIAL FULFILMENT  
FOR THE REQUIREMENTS OF  
THE MASTER DEGREE  
IN  
OBSTETRICS AND GYNAECOLOGY

٤٨٧١٥

SUPERVISED BY

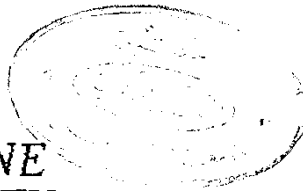
تم تصحيحه  
١٩٩٢/٩/١٩  
٢٠١١

PROF. DR. ALI FARIED MOHAMED ALI  
PROFESSOR OF OBSTETRICS AND GYNAECOLOGY  
FACULTY OF MEDICINE  
AIN SHAMS UNIVERSITY

ف.د. علي  
ف.د. ولاء

DR. WALAA MAGED FAKHRE  
LECTURER OF OBSTETRICS AND GYNAECOLOGY  
FACULTY OF MEDICINE  
AIN SHAMS UNIVERSITY

FACULTY OF MEDICINE  
AIN SHAMS UNIVERSITY



1993





*TO:*

*MY PARENTS*

## ACKNOWLEDGEMENTS

I wish to express my sincere appreciation and gratitude to PROF.DR. ALI FARID MOHAMED ALI .Professor of Obstetrics and Gynaecology, Ain Shams University without his guidance, supervision and encouragement, this work would have never been completed. I also appreciate his advice, help and criticism in revising and editing this work.

Also I wish to express my greatest gratitude and appreciation to DR. WALAA MAGED FAKHRE . Lecturer of Obstetrics and Gynaecology, Ain Shams University for his generous advice and support during the study.

## CONTENTS

	Page
- INTRODUCTION	1
- DEFINITION	4
- CLASSIFICATION	7
- INCIDENCE	9
- RISK FACTORS	13
- MICROBIOLOGY	24
* Causative organisms	24
* Pathogenesis and mode of infection	34
* Bacteriologic diagnosis	53
- PATHOLOGY	64
* Acute salpingitis	64
* Chronic salpingitis	67
- SEQUELAE	73
- CLINICAL PRESENTATION	87
- DIAGNOSIS	94
- MANAGEMENT	104
* Prophylactic measures	104
* Active treatment	107
- SUMMARY	130
- REFERENCES	133
- ARABIC SUMMARY	

# *INTRODUCTION*

## INTRODUCTION

Pelvic inflammatory disease is a non specific term used for a variety of findings in the upper female genital tract, characterized by inflammation and infection. Both endometritis, salpingitis, peritonitis and tubo-ovarian abscess are included in this category.

Pelvic inflammatory disease is nearly always bilateral and is essentially a disease of young adults (Jeffcoate, 1975).

A direct estimate of the number of women who develop PID is not available but pelvic inflammatory disease seems to be a common disease, accounting for 5-10% of all gynecologic hospitals admissions in different parts of the world (Eschenbach, 1976).

Pelvic inflammatory disease is a major medical and public health problem being one of the most important cause of acute and chronic morbidity in the reproductive years of age all over the world since it results in serious sequelae such as increased prevalence of infertility and ectopic pregnancy (Mascola et al., 1983).

While the percentage vary in different patient populations, the incidence of pelvic inflammatory disease due solely to the gonococcus appears to be about 20% (Hedberg and Anberg, 1965). An additional large group will have a mixed infection that includes the gonococcus and other aerobic and anaerobic organisms. Approximately 30% of patients with pelvic inflammatory disease will have an exclusively anaerobic infection (Seligman and Willis, 1980). Other patients may have infection due to organisms that can not be identified by ordinary bacteriological methods, but may be due to such organisms as Chlamydia or Mycoplasma (Hibbard, 1980).

Recurrent PID is also common, and studies indicate that a large percentage of salpingitis patients have a history of previous infection, ranging from 21-63% (Ledger , 1977).

The goal of this review is to provide knowledge necessary to manage pelvic inflammatory disease, and to accomplish this goal, one requires an understanding of the pathogenesis of these infections, the micro organisms

involved. appropriate microbiologic techniques to identify these pathogenic organisms. the antibiotics available and their spectrum of activity and an awareness of the role of surgery in the management of such infections.

## *DEFINITION*

## DEFINITION

St. John et al., (1980) reported that most physicians use the term pelvic inflammatory disease to describe a wide variety of acute and chronic conditions resulting from ascending, traumatic and /or surgical infections. However, they pointed to the changed trend in the use of this term as being used to describe diseases caused by acute ascending genital tract infection.

Eschenbach (1984), reported that acute pelvic inflammatory disease is an infection occurring among sexually active, menstruating, or non pregnant patients. He added that, in most cases, salpingitis occurs from a prior cervicitis, and an intermediate stage of endometritis probably also exists prior to the development of tubal infection.

Westrom (1980), pointed that pelvic inflammatory disease is usually used to define an acute febrile illness in a woman with a pelvic pain and signs of genital infection.

Again, Sweet and Gibbs (1985), have reported that acute pelvic inflammatory disease is an acute clinical syndrome attributed to ascending spread of microorganisms from the vagina and endocervix to the endometrium, fallopian tubes and /or contiguous structures.

Landers and Sweet (1986), have reported that the term pelvic inflammatory disease specifies neither the site nor the type of infection. So, it is preferable to indicate at least the site of infection by using such terms as endometritis, salpingitis, salpingo-oophoritis, or tubo-ovarian abscess. However, they pointed that because these infections often represent a progression from endometritis to salpingitis and ultimately to pyosalpinx, hydrosalpinx, or tuboovarian abscess, it may be difficult to find a term that specifies the type and extent of infection.

The most common pelvic inflammatory disease is acute salpingitis, which probably involves concurrent endometritis in most cases. However, endometritis alone is rare except in post abortal or post partum patients (Landers and Sweet, 1986).

Novak et al., (1975) have reported that although in most cases of pelvic inflammatory disease, the tubes seem to bear the primary impact of the infectious process, there is a strong tendency for extension to the ovaries and pelvic peritoneum due to the propinquity of these structures to the uterus and tubes, and the intimacy of the lymphatic and vascular supply of all the pelvic organs. So, the syndrome of genital infection is a composite one, produced by various degrees of tubal involvement, with or without extension to the ovaries and pelvic peritoneum.

They have also added that the usual tendency for pelvic inflammatory disease is to begin with a rather acute episode, followed by either complete resolution or gradual subsidence into a more chronic process characterized by frequent acute or subacute resurgence.

# *CLASSIFICATION*