SURVEY OF CASES OF

ECTOPIC PREGNANCY

ADMITTED IN HELLWAN GENERAL HOSPITAL
OVER THE PERIOD 1984-1988

THESIS

"SUBMITTED IN PARTIAL FULFILMENT OF"
THE MASTER DEGREE IN
OBSTETRICS & GYNECOLOGY

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1989

ACKNOWLEDGMENT

I would like to express my deepest gratitude to Prof. Dr. AMIN EL-ZENEINY, Professor of Gynecology and Obstetrics, Faculty of Medicine, Ain Shams University; for his perpetual guidance and encouragement. His supervision for this work is an honor to me.

I wish to thank Dr. MAHER OMRAN, Lecturer of Gynecology and Obstetrics, Faculty of Medicine, Ain Shams University; for his generous advice, without which this work would have not been conducted in the proper way.

Also, I wish heartly to thank all my great Professors in the Gynecology and Obstetrics Department of Ain Shams University for their endless devotion for teaching.

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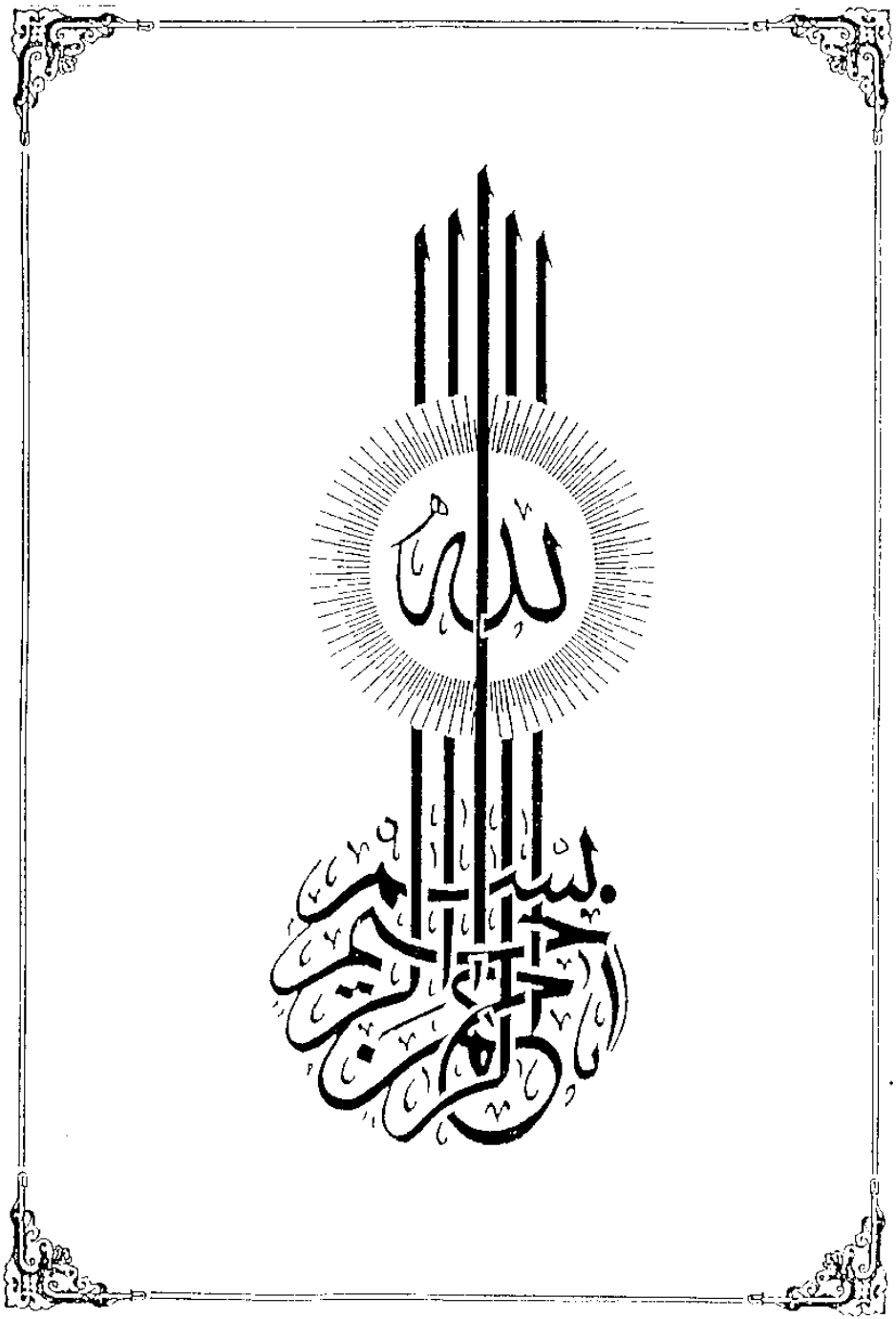

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INTRODUCTION

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Ectopic pregnancy is implantation of the fertilized ovum in a location other than the endometrium of corpus uteri. Ectopic pregnancy is a broader term than extrauterine pregnancy, since it includes implantation in the interstitial portion of the oviduct and implantation in the cervix as well as pregnancy in the extrauterine portion of the oviduct, the ovary, the broad ligament and elsewhere in abdomen. Tubal pregnancy accounts for about 95% of ectopic gestation (Pritchard, et al., 1985).

A strange case of retroperitoneal ectopic pregnancy had been recorded by Hall, et al., (1973). They postulated that fertilized ovum was transformed to retroperitoneal space via the lymphatics.

Ectopic pregnancy continues to be a major gynaecological problem and the potential for subsequent fertility is poor (Kitchin, et al., 1979).

The incidence of ectopic pregnancy has been roughly doubled in most parts of the western since the mid 1960s. Although fatality rate has fallen, deaths from ectopic pregnancy still accounting for a good percentage of all maternal deaths (approximately 10%). They were the single most common cause of maternal death among non-white women in the United States in 1977 (Ory, 1981).

The recent increase in the incidence of ectopic gestation is due to several factors, including wide spread voluntary curtailment of family size by fertile women, elective abortions, apparent increase in gonorrhoea and pelvic inflammatory diseases (P.I.D.); pregnancy after total sterilization and possible the use of intrauterine devices (I.U.Ds.) (Westrom, et al., 1981).

Meshiach, et al., (1982) and Hemminiki (1987); suggested that some of the increase in ectopic pregnancy was due to improved diagnostic techniques, apparently more of such ectopic pregnancies which previously remained subclinical become diagnosed.

Recently there is an overall risk of around 2% ectopic pregnancies after in vitro fertilization and embryo transfer, the very first reported human pregnancy after in vitro fertilization and embryo transfer (I.U.F.-E.T.) was an ectopic pregnancy (Youich, et al., 1985).

The early diagnosis of ectopic pregnancy before rupture of tubal pregnancy will enable appropriate care to be provided and will not only decrease mortality and immediate morbidity but will also result in better prognosis for future childbearing as early diagnosis prior to rupture will afford the physician time to plan a more leisurely and conservative surgical management (Decherney and Kase, 1979).

HISTORICAL BACKGROUND

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A famous Arabic writer, Albucasis, described a case of extrauterine pregnancy in 963 A.D. and Mauriceau's 17th century textbook of Obstetrics first noted extrauterine pregnancy as a possible obstetrical complication. Laparotomy for the arrest of haemorrhage in extrauterine pregnancy was suggested by Hubert in 1849 and again by Rogers in 1867, however it was not until Parry and Lea completed their elegant monograph on extrauterine pregnancies in 1876 that the serious implications of this disease were unraveled. A major progress was achieved by Tait in 1883 when he first performed salpingectomy and thereby significantly reduced the mortality rate which was as much high as 70%. Prior to this time the management of extrauterine pregnancy has included starvation, purgation, ergots, injection of morphine into the gestational sac, mechanical compression of the maternal abdomen, abdominal drainage of gestational sac and electrocautery (From DeCherney and Russell, 1987).

AIM OF THE WORK

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The aim of the present thesis is to study the incidence, aetiology, diagnosis and treatment of ectopic pregnancy among patients admitted to Hellwan General Hospital through the last five years (1984 1988).

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AETIOLOGY
OF
ECTOPIC PREGNANCY

AETIOLOGY OF ECTOPIC PREGNANCY

Although it has been frequently quoted that 1 of 300 pregnancies is ectopic, Fontanilla and Anderson (1955), in an excellent statistical study indicate that the occurrence is considerably more frequent. Changes in contraceptive practice, innovations in sterilization procedures, or advances in diagnosis share in increasing incidence of ectopic pregnancy but still further biologic and epidemiologic studies are needed to bring more information to the subject (Barnes, et al., 1983).

Risk factors associated with ectopic pregnancy are variously reported. Race and socioeconomic factors and to a lesser degree age and gravidity are implicated in some American data which show a rate of ectopic pregnancy higher in Negroes (Fontanilla, et al., 1955). Erkkola, et al., (1977); in urban population (Lloyd, 1967) and in relatively deprived socioeconomic groups (Bobrow, et al., 1962).

The increase in ectopic pregnancy was most pronounced in women aged 20 to 30 years with mean age 28.5 years (Thorburn, et al., 1983).

RELATION BETWEEN PELVIC INFLAMMATORY DISEASE (P.I.D.) AND ECTOPIC PREGNANCY

Pelvic inflammatory disease remains the principal aetiologic factor in ectopic pregnancy. It has been repeatedly shown that gross or histological evidence of post pelvic infection can be found in 30-50% of cases of ectopic gestation (Westrom, et al., 1981). The frequency of P.I.D. diagnosed by the presence of bilateral peritubal adhesions or hydrosalpinges vary between 27% and 35% (Thorburn, et al., 1983).

Thorburn, et al., (1983) found in this study of 328 cases of ectopic gestation that the right tube is more often involved (56%) than the left tube (44%) and (50%) of these patients had undergone abdominal surgery, half of them being pelvic ones. He also found that the rate of patients with history of appendicitis and appendicectomy are equal in both control group and patients with ectopic pregnancy.

Neisseria gonorrhoea is the causative agent in most primary tubal infection (Decherney and Jones, 1985). The organism is transmitted with great efficiency via sexual intercourse. Most infected women will be asymptomatic (80-90%) and the risk of male carrier infecting his female partner may be as high as 90% (Escenbach, 1980). Greeg and co-workers (1980) had demonstrated that gonococcus produces

lipopolysaccharide toxin that destroys Fallopian tube cilia. Draper, et al., (1980) utilizing scanning electron microscopy, noted that there is loss of the normal Fallopian tube endothelial architecture following acute salpingitis.

Previous clamydial salpingitis may be a major aetiologic factor leading to ectopic pregnancy, sixty five per cent of women with ectopic pregnancy have IgG serum antibody to Clamydia trachomatis and 21% of women pregnant in utero have such antibodies (Soensson, et al., 1985).

Intrauterine contraceptive device (I.U.D.) users have a two to four fold increase risk to develop acute salpingitis (Eschenbach, 1980). Initially no particular I.U.C.D. was implicated as having a statistically significant increased risk above the other brands (Burkman, 1981). More recently, Lee and co-workers (1983) had demonstrated that women wearing Daikon-shield I.U.C.D. were at statistically significant increased risk to develop acute pelvic inflammatory disease. This represented a five fold increase in risk of I.U.D.; a condition known to predispose to ectopic pregnancy for women who douches at least weekly was twice that of women who never douched (Chow, et al., 1985).

RELATION BETWEEN INTRAUTRINE CONTRACEPTIVE DEVICE AND ECTOPIC PREGNANCY

Unplanned pregnancies which occur with an intrauterine contraceptive device (I.U.C.D.) in situ are often ectopic and many studies have shown that ectopic to intrauterine pregnancy ratio is increased by about seven folds under these circumstances (Lehfeld, et al., 1970 and Uessey, et al., 1974)