ANALYSIS OF BASIC WORK-UP OF INFERTILE COUPLES AT AIN SHAMS INFERTILITY CLINIC

Thesis Submitted in Partial Fulfilment for the Degree of M.Ch. Ob. & Gyn.

Presented By

Emtethal Shehata El-Kabati

UNDER SUPERVISION

Prof. Dr. Mohamed Nagi El-Makhzangy

Professor of Obstetrics & Gynacology

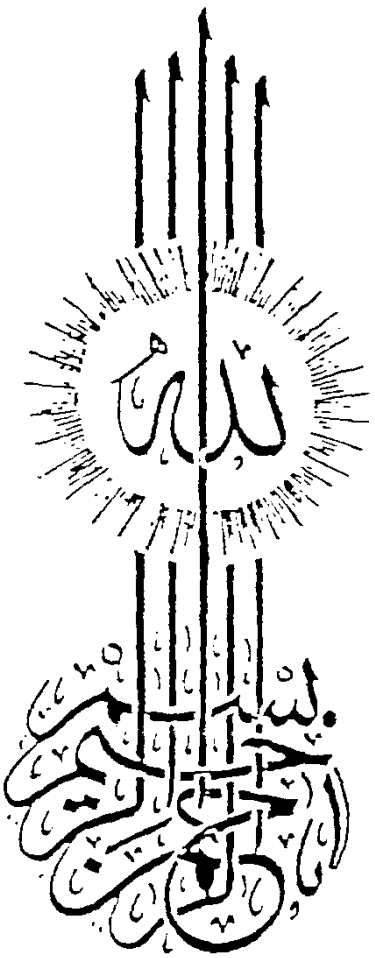
Ain Shams University - Faculty of Medicine

Dr. Ahmad Rashed

Assist. Prof. of Obstetrics & Gynaecology

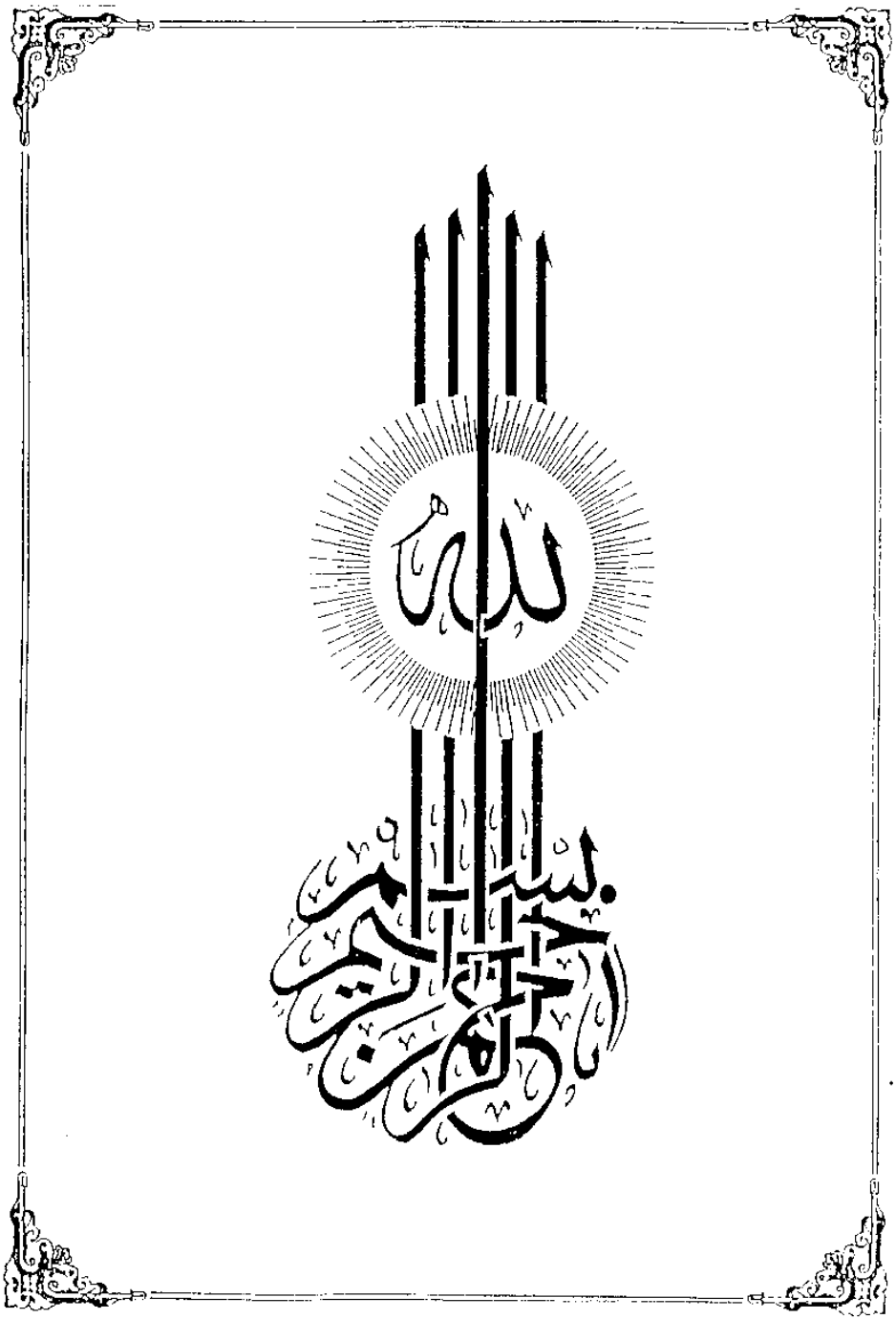
Ain Shams University - Faculty of Medicine

1987



وما توفيقي إلا بالله

صدق الله العظيم



ACKNOWLEDGEMENT

My deepest appreciations are due to **Professor Dr. M. Nagy El Makhzangy,** Professor of Obstetrics and Gyanecology, Faculty of medicine, Ain Shams University, who assigned the work and continuously helped and encouraged me during this work.

I am specially deeply thankful to **Dr. Ahmad Rashed,** Assistant Professor of Obstetrics and Gynaecology, Faculty of Medicine, Ain Shams University for the kind supervision, valuable advice, guidance and great help throughout this thesis.

I am deeply indebted to **Prof. M.b. Sammour** and all staff conducting the supervision of the outpatient infertility clinic of department of obstetrics and gynaecology, Ain Shams Univeristy.

INDEX OF CONTENTS

o o o o

INTRODUCTION

INTRODUCTION

Infertility is the inability to achieve pregnancy within a stipulated period of time, usually one year.

Medically, infertility is a unique condition in that two individuals must be considered. As the husband or wife, or both, may have factors contributing to the condition, a cooperative investigation is necessary (Novak et al., 1979).

Failure of conception is one of, if not the most common clinical condition in gynacologic practice the incidence of this problem amount (10-15%) of couples (Speroff 1983).

There are many factors which affect the behaviour and actions of the couples having difficulty conceiving, there is no concensous among physicians and different infertility treatment centers regarding the timing, components constituting basic diagnostic work up and the chronological order of their utilization. The infertility outpatient clinic in Ain-Shams maternity hospital

is well known and established center in Cairo. The clinic provide free services for the diagnosis and treatment of infertility.

The objectives of this study is to analyse retrospectively the data recorded for couples attending this clinic since 1983 to 1985 Furthermore, a prospective study one 100 couples is conducted to demonstrate the value of post-coital test in the basic work-up.

More couples are presenting of the initial interview. This should be encouraged as they share the responsibility for the infertility. Mutual cooperation and pursuit of knowledge concerning this medical problem fosters a proper psychological approach and prevents the defensive pointing of a finger of blame by one or the other partner. (Novak 1979).

The goals of an Infertility Evaluation:

The goals of an infertility evaluation is 2 folds to establish the etiology of the infertility and to give a prognosis for future fertility. Although it has been estiamted that less than 50% of couples initiating an infertility evaluation will ultimately achieve fertility, these statistics may be improved by careful attention to an etiologic diagnosis. Appropriate management can only be accomplished if the reason for infertility has been established. An infertility evaluation is entirely elective, and no matter how well organized and thorough the medical approach to diagnosis, a satisfactory result will be achieved only if the patient undetrstands the goals and completes the evaluation. Therefore, patients must be informed about the reasonable of the investigative procedures. Once the diagnosis is made, methods of therapy and the statistical prognosis for pregnancy can be discussed.

Three major areas must be considered in establishing the diagnosis and prognosis. These include:

(1) The age of the wife.

(2)The duration of pregnancy exposure, and

(3) The medical factor etiologically responsible.

Fertility in women declines after the age of 35 year. Guttmacher reported a 4.5% infertility rate in women married between the ages of 16 and 20 yealrs, the incidence rose to 31.8% for women married between the ages of 35 and 40 years, and after the of 40, the infertility rate approached 70%. Pregnancy is rare after the age of 45 years and the reported maximal age for successful pregnancy is about 52 years, with only 1 out of more than 60,000 births occurring past the age of 50. Thus, both the age of the wife, and the duration of the infertility are prognostic indicators of the seriousness of the problem. The major area of concern then in the investigation is to establish the medical factor responsible. A detailed history and physical and pelvic examinations are essential. The initial interview is probably the most important of the entire infertility investigation, as this is when a thorough data base is established. Equally important, however, is the development of the rapport necessary to ensure the couple's open cooperation with the invelstigator. (Novak et al., 1979).

The initial interview:

Investigation of the infertile couple begins with a history and a physical examination to exclude major medical or gynecological conditions. A proper history documents the age of the couple, the duration of the marriage, past reproductive histories of both partners, and the results of any previous studies. A medical history is essential for indicating significant disease, chronic use or exposure to toxins, nutritional history, and normality of menstrual function. A candid account of the sexual and behavioral interactions of the couple is necessary. It is appropriate to interview both partners alone first, as some confidential details may not be revealed in the presence of the other. For example, some wives may not admit to premarital relations or pregnancies and husbands likewise may not volunteer information about previous fertility or a history of venereal disease.

The social history of the couple is of practical importance because of the expense and unavoidable inconvenience of parts of the infertility evaluation. If both members are employed, especially if working hours are different, they may find it impossible to keep certain appointments or be prepared for certain tests. Occupations

can also be important in relation to exposures to toxins, heavy metals, heat, or radiation, as well as to pressure an emotional stress. The religion of the infertile couple should be noted because of some religious prohibitions. The collection of a semen specimen by masturbation is a problem for some catholic males and having sexual intercourse within 7 days of menstrual bleeding is prohibited by Orthodox Jewish couples. Clerical dispensation may be requested for a Catholic male to obtain a semen specimen; the Orthodox Jewish woman who ovulates during the time of prescribed abstinence following menstruation can be treated by delaying ovulation with estogens.

It is well to establish the motivation and interest of a couple before embarking on an extensive infertility evaluation. If there is reticence on the part of either husband or wife, the causes of this should be examined. Sometimes the visit has been prompted by marital discord. A tenuous marriage will not be strengthened by a pregnancy and such couples would benefit more from marriage or psychiatric counseling than from an infertility evaluation.

Finally, the details of any previous infertility evlauation are important, including review of any x-rays

and laboratory studies performed and interpretation of basal temperature charts. One should not hesitate to repeat equivocal or contradictory tests.

The physical examination seeks clues related to ovarian or hormonal dysfunction and physical or mechanical problems within the pelvis. The pelvic examination establishes the normality of the reporductive organs insofar as possible with bimanual examination and a vaginal smear. The cervix may show evidence of infection, prior cryosurgery, or lacerations, the bimanual examination should check specifically for nodularity, tenderness or thickening of the uteroscaral ligaments or the posterior cul-de-sac indicating endometriosis, Prior pelvic inflammatory disease is suggested by the finding of thickened adnexal areas or lack of uterine mobility.

Although an absolute etiologic diagnosis is usually impossible at the first visit, tentative diagnosis is appropriate if there are suggestive factors in the history or physical examination, as it tends to focus attention on these improtant details during subsequent examinations and tests. At the first visit, in addition to discussing the possible cause, it is wise to involve both partners

in a discussion of goals and expectations, the need for a complete investigation, the time and expense involved, the statistical probability of help, and the prognostic value of the investigation. It is important for them to realize that if teatment seems indicated, a year must elapse to evaluate the benefit of therapy. Educating a couple about the evaluation, the tests, and procedures is a function of the initial visit, and a definite investigative plan, with a predictable and point, should be outlined at this time. A slide show or filmstrip describing the infertility work-up is helpful. A routine screening infertility evaluation should be compelted with only an additional three or four office visits. A "wait and see" attitude can only be condemned. At the compeltion of the interview the couple should have been provided with sufficient information to make intelligent choices of alternatives and their questions, as well as their anxieties and concerns, conscientiously addressed. (Novak et al., 1979).

INVESTIGATIVE TECHNIQUES OF INFERTILITY FACTORS