

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

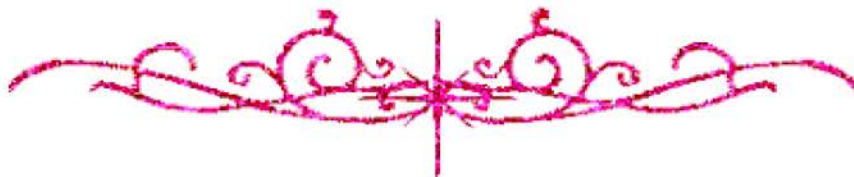
قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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بعض الوثائق الأصلية تالفة





بالرسالة صفحات
لم ترد بالأصل



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The Effect of Oocyte- Spermatozoa Exposure Time on The Outcome of IVF Process

Thesis submitted for partial fulfillment of the
MD degree in Obstetrics and Gynecology

By

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"يرفع الله الذين آمنوا منكم والذين أوتوا العلم درجات
والله بما تعملون خبير"

"صدق الله العظيم"

(سورة المجادلة - آية ١١)

To :

My Son

Hisham.

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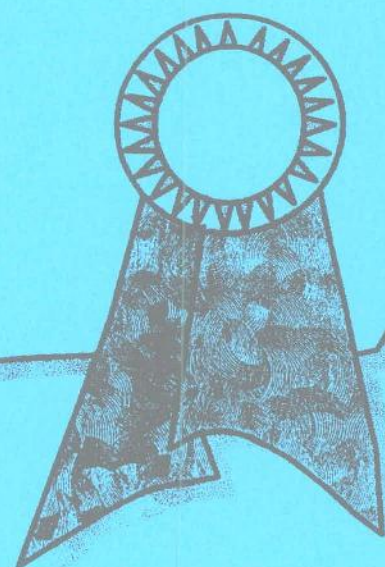
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List of Abbreviations

AR	Acrosome Reaction
ART	Assisted Reproductive Technology
BMI	Body Mass Index
CC	Clomiphene Citrate
COH	Controlled Ovarian Hyperstimulation
DES	Diethylstilbesterol
DHEAS	Dehydro-epiandrosterone sulphate
DLN	Double Lumen Needle
E ₂	Estradiol
FSH	Follicle Stimulating Hormone
GH	Growth Hormone
GIFT	Gamete Intrafallopian Transfer
GnRH	Gonadotropin Releasing Hormone
GV	Germinal Vesicle
HCG	Human Chorionic Gonadotropin
HMG	Human Menopausal Gonadotropin
HSF	Hydrosalpinx Fluid
HTS	Human Tubal Fluid
ICSI	Intracytoplasmic Sperm Injection
IUI	Intrauterine Insemination
IVF	In Vitro Fertilization
LH	Luteinizing Hormone
OCC	Oocyte Cumulus Complex
OHSS	Ovarian Hyperstimulation Syndrome
PCC	Premature Sperm Chromosome Condensation
PCO	Polycystic Ovary
2PN	2 Pronuclei
POST	Peritoneal Oocyte and Sperm Transfer
PVS	Perivelittine Space
PZD	Partial Zona Dissection
SLN	Single Lumen Needle
SUZI	Subzonal Insertion of sperm
TET	Tubal Embryo Transfer
TQM	Total Quality Management
ZIFT	Zygote Intrafallopian Transfer
ZP	Zona Pellucida

INTRODUCTION



INTRODUCTION

Assisted reproductive technology (ART) refers to all techniques involving direct retrieval of oocytes from the ovary. The first & still most common procedure is InVitro Fertilization (IVF), but there is an ever increasing list of technologies, namely Gamete Intrafallopian Transfer (GIFT), Zygote Intrafallopian Transfer (ZIFT), Tubal Embryo Transfer (TET), Peritoneal Oocyte and Sperm Transfer (POST), Subzonal Insertion of Sperm (SUZI) & Intracytoplasmic Sperm Injection (ICSI) (*Speroff et al., 1994 b*).

The idea of treating infertile women by IVF was initiated in the 1930s, before the more recent developments have led to the wide spread study of mammalian fertilization & preimplantation embryo. During this period, several attempts were made & new methods were proposed as knowledge of reproductive biology accumulated (*Bigger 1989*).

The process of IVF&ET is the extraction of oocytes, fertilization in the laboratory and transfer of embryos into the uterus (*Speroff et al., 1994 b*).

The first reliably documented pregnancy following IVF in human occurred in Melbourne in 1973, when a transient rise in human chorionic gonadotropin level (HCG) was found following the transfer of one 8-cell stage embryo (*Steptoe & Edwards, 1976*).

In 1978, Steptoe and Edwards reported the birth of Louise Brown the first living child conceived by in vitro fertilization (*Steptoe & Edwards., 1978*).

Louise Brown's birth on July 25, 1978 was a landmark in the treatment of infertility & heralded a new era in reproductive medicine (*Boyer's & DeCherney's, 1987*).

Since the birth of the first Egyptian IVF/ET baby Heba, in 8th of July 1987, the procedure became more accepted at the individual and national levels (*Mansour et al., 1988*).

ART can be divided into three main phases, phase one includes preparations before ART treatment, including evaluation of couple's infertility, performing further investigations when required, and choosing the modality of treatment.

Phase two is the core of ART program and includes controlled ovarian hyperstimulation, oocyte retrieval, laboratory work and transfer of embryos to the uterus.

Phase three includes the hormonal support for maintenance of the conceived embryo (*Cohen et al., 1994*).

There are many indication for ART including infertility problems as: tubal factor (bilateral tubal block), male factor, cervical factor, immunogenic factor, unexplained infertility, multifactorial infertility (combined tubal and male factors) and non-infertility problems as: recurrent pregnancy loss, hostile gestational environment (Rh sensitization), gene therapy, sex selection. However treatment is still costly and is associated with side effects (*Neuman et al, 1994*).