THE RELATION BETWEEN FOLLICULAR FLUID INSULIN-LIKE GROWTH FACTOR – II (IGF – II), AND OOCYTE MATURATION AND EMBRYO DEVELOPMENT IN INTRACYTOPLASMIC SPERM INJECTION (ICSI) CYCLES

Protocol of Thesis

Submitted for Partial Fulfillment of Master Degree in Obstetrics and Gynecology

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العلاقة بين عامل النمو المشابه للإنسولين - ٢ في السائل الحويصلي ونضج البويضة وتطور الجنين في حالات الحقن المجهري

> بروتوكول رسالة مقدمة من الطبيب/أسامة يحيى محمد عبد الحافظ بكالوريوس الطب والجراحة (٢٠٠٢) - جامعة القاهرة

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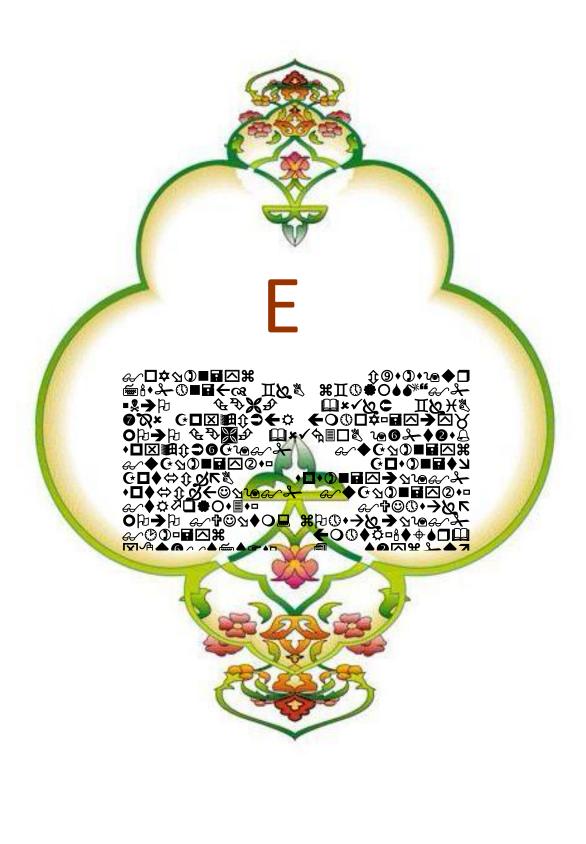
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List of Abbreviations

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ALS : Acid Labial Subunit

BMI : Body Mass Index

BP-Pr: Insulin Like Growth Factor Binding Protein

Proteases

c-AMP : Cyclic Adenosine Monophosphate

CC : Clamiphene Citrate

CGH : Comparative Genomic Hybridization

CTET : Clinical Touch Embryo Transfer

DOI : Duration Of Infertility

ET : Embryo Transfer

FSH : Follicle Stimulating Hormone

GH : Growth Hormone

GnRHa: Gonadotropin Releasing Hormone Agonist

GV : Germinal Vesical

HCG: Human Chorionic Gonadotropin

HMG: Human Menopausal Gonadotropin

ICSI: Intracytoplasmic Sperm Injection

IGF: Insulin Like Growth Factor

IGF-I-R: Type 1 IGF receptor

IGFBP: Insulin Like Growth Factor Binding Protein

IGFB-RP: Insulin Like Growth Factor Binding Protein

related proteins

List of Abbreviations

IVF : In Vitro Fertilization

Kg: Kilogram

LH : Luteinizing Hormone

M : Meters

MESA : Microsurgical Epididymal Sperm Aspiration

MMPs : Matrix Metalloproteinase

m-RNA : Messenger Ribonucleic Acid

OHSS: Ovarian Hyperstimulation Syndrome

OMI : Oocyte Maturation Inhibitor

OPU: Ovum Pick Up

PB : Polar Body

PCO: PolyCystic Ovary

PGD: Preimplantation genetic diagnosis

PTH : Para Thyroid Hormone

PZD: Partial Zonal Dissection

SD: Standard Deviation

SUZI : Sub Zonal Insemination

TGF-ß : Transforming Growth Factor Beta

TESE: Testicular Sperm Extraction

UGET: Ultrasound Guided Embryo Transfer

ZP : Zona Pellucida

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Introduction

Infertility by itself doesn't threaten physical health but has a strong impact on psychological and social well being of couples (*Ashkani et al.*, 2006).

Louise Brown, the first baby conceived in after IVF, was born on 25 July 1978 and turned 28 last year. From one perspective, her birth can be seen as the culmination of 300 years of medical and scientific investigation aimed at understanding the fascinating process of reproduction (*Clarke*, 2006).

In those who have no identifiable or correctable causes, ICSI provides new hope for couples with male infertility who, in the past, could only choose among therapeutic donor insemination, adoption or voluntary childlessness (*Chow and Cheung*, 2006).

Intracytoplasmic sperm injection can be used successfully to treat couples with male factor infertility and those who have failed standard IVF. Precisely adapted protocol of ovarian hyperstimulation for every patient could diminish the costs of treatment without negative influence on ICSI results (*Kuczynski et al.*, 2001).